A. Bloun

WINE INSTITUTE
85 SECOND STREET
SAN FRANCISCO, CALIF.

LIBRARY OF
WINE INSTITUTE

A

HISTORY AND DESCRIPTION

OF

MODERN WINES.

BY

CYRUS REDDING.

SECOND EDITION,

WITH CONSIDERABLE ADDITIONS, AND A NEW PREFACE DEVELOPING THE SYSTEM OF THE PORT WINE TRADE.



LONDON:
PRINTED FOR WHITTAKER & Co.
AVE MARIA LANE.

1836.

R24

FROM THE LIBRARY OF
WINE INSTITUTE
85 SECOND STREET
SAN FRANCISCO

LONDON:
GILBERT & RIVINGTON, PRINTERS,
ST. JOHN'S SQUARE.

84



INTRODUCTION.

THE separation of all knowledge which is of a useful character from abstruse terms or pedantic conjectures, seems demanded by the call for works which convey as much as possible of fact. Man is become a more active animal than he ever was before. While the mass of human life appears to have received a prolonged duration, it seems given only to stimulate activity, and leaves the impress upon the mind, owing to its redoubled occupation, that years fleet with more than their former rapidity.

The dry wines of the moderns are, there is no doubt, much more perfect than those of the ancients as far as can be discovered by any thing authentic, which has reached the present time. It may not be amiss to mention briefly, those writers who have treated this subject, and treated it

generally with that attachment to favoured theories which, a little time ago, rendered so many men of talent agreeable enthusiasts in behalf of all that is old, however dubious the authority upon which they founded their conclusions. What we know of the ancients as fact, we may safely use; what we guess relating to them, if always amusing, it is not always useful to communicate.

Most wines used by the Romans were adulterated, and were consequently not wines of the purest kind, in the modern sense of the term, nor indeed, in the ancient sense, as the reader will see in the account of the best wine given by Mago, quoted hereafter. It was in the most flourishing times of Rome, in the Augustan age, that we discover wine thus deteriorated. Yet this was the age of the Falernian, the taste and colour of which have been so much disputed. Some have fancied it was like wine of Madeira in colour. One writer thinks it was white, and most commentators declare it was black, but it was very probably neither. The poets frequently use a slight appearance which any object assumes, for the reality, hence the "black" of Martial, applied to Falernian, might be intense red, or purple, or violet, but was hardly white. To receive the language and allusions of poetry as direct evidence in such a matter, would be to change the nature of poetry itself, which professes to accommmodate most things upon which it touches to a standard of non-existing excellence.

The historians of wine have hitherto been of the medical profession. To render it more singular, even the laureate of the vine, Redi, with his "Bacco in Toscana," was a physician, though in treating the subject he affords, by his facetiousness, a striking contrast to the solemnity of style

and manner, which marks the grave periods of his brethren. Bacci, a patient and learned writer, wrote his history in Latin, and died at the close of the sixteenth century; his work on wine is, in many respects, valuable. In 1775 Sir Edward Barry, having read Bacci, composed his singular observations on the "Wines of the Ancients." Using all of Barry's work which was capable of being admitted into a new one, the writer of which had the benefit of the information obtained since Barry's time, and on whose ignorance, without such information, he rather ungraciously reflects, Dr. Henderson put together his volume on wines, having at first designed only to publish an improved edition of Barry, until he saw the task of making sense of so strange a jumble of untenable inference was impossible. It is singular that in so short a time as that which has elapsed since 1775, chemistry should have gained so much. It is true that which comes of science developes itself slowly, while the offspring of imagination careers in advance of time; yet allowing for this, the work of Barry seems the production of an intellect of a common-place order, or the state of chemical knowledge was, very recently, narrow and obscure beyond common supposition. Barry cannot write about Greek wines but he must mingle them with Bath waters, while his implicit faith in every thing mentioned by ancient writers, is carried to a ludicrous extent. He finds that Hippocrates gave his patients Thasian wine in the proportion of twenty-five parts to one of water, and thence infers the potency of the wine, beyond any belonging to these "degenerate days," with the weight of the still in their favour, of which the ancients knew nothing.

Whether from being early imbued with those extravagant notions respecting antiquity, which in their excess are so censured by Locke, or oppressed with awe at the deep knowledge of medicine found in Hippocrates and Galen, so that they take all other things for granted if they be half obscured in the past, it is not easy to decide, but physicians have in general a most capacious faith in the infallibility of the ancients. The days when Cæsar and Alexander were thought different from ordinary men in stature, strutting with truncheons in their hands, and withering armies with a curl of the lip, are past. Cæsar, that beau ideal of a hero, may now be suspected of favouring himself a little in his Commentaries, and yet not be less admired for his literary and military talents; and Alexander may be pronounced somewhat of a madman and a drunkard, without an accusation of bringing royalty into contempt. Now, the inconoclasts are abroad, images of mistaken worship are broken, ancient and modern heroes are alike found to be but men, and truth, after a struggle of ages, triumphs over mistaken opinion.

A brief account of the contents of Sir Edward Barry's volume will explain them sufficiently. Little information of moment on the wines of the ancients, is mixed with much absurdity. A great deal is gathered from poetical passages, that allude but generally to the subject of wine; and after all, even with what is left on agriculture by one or two of the ancients, such as Pliny, Columella, and others, the information of that which it was most important to know, amounts to little, namely, what were the quality and flavour of the ancient wines. Barry was perhaps too much of a Bath physician of his own time, according to

Anstey's sketching, to apply to his own reasoning the quotation about Glycon, which he oddly enough uses in his book.

> Nec, quia desperes invicti membra Glyconis.
>
> " You desire in vain the matchless limbs of Glycon."

None of the passages in Barry respecting wine, quoted from the poets, seem half as clear in meaning as this line. The commentators agreed that Glycon must have been a wrestler or pugilist of fine frame; but the Farnese Hercules was discovered with Glycon's name upon it as the sculptor, and away vanished the unanimous commentaries on the passage. Of a far more uncertain nature are conjectures on the quality, colour or taste of ancient wines, and many other matters about which volumes upon volumes have been written.

Hippocrates first led Dr. Barry to the subject of wines, by his medical rules respecting them. Hence the doctor says, he was induced to inquire into their nature and principles. He thinks Hippocrates mistaken, when he speaks of black wines, " which are nowhere produced." Now there are the " black" wines of Cahors, in France, at this day; their colour is that of ink, arising in reality from their intense violet. Barry was not aware that Hippocrates, when he speaks of wine and its use in different degrees of strength, he can scarcely guess why, might be treating of a remedy for fever, at this moment used in several parts of Greece. This is a much better way of accounting for what seems " obscure," in the rules of the Greek physician, than any light Barry has thrown upon the subject. Old thick wine is still a remedy in Cyprus

for tertain and quartan agues, common in that and some other of the Greek islands, where the old wine used to burn like oil. Dr. Henderson does not seem to be aware of this circumstance, when he corrects Barry, and supposes the drink was used merely as a diluent, for even in that character, in most fevers, wine would seem oddly applied, unless the patient were in a state of convalescence; I say this with due submission to better Esculapian knowledge.

Barry's first chapter treats of the nature and principles of wine, and gives Boerhaave's idea of fermentation, a subject now better understood. Water, fire, terrestrial, saline, and oily parts, with ardent spirit, Barry describes as the component substances of wine. In his second chapter, he enters upon "the wines of the ancients," and introduces Galen and the Italian wines; Dioscorides, Pliny, and Athæneus, too, are quoted. "Inspissated" wines are touched upon; Cato, Columella, and Bacci, are introduced. Dr. Barry then considers the mode adopted by the ancients in making and preserving their wines; and announces the notable discovery, that they were either weak, strong, or intermediate. He laments that modern wine-coopers know nothing of fining with isinglass, eggs, and similar matters, though this has been practised across the Channel, and probably in England, time out of mind. The mixing of salt water with viscid wine is noted, and that Chian wine was adulterated into Falernian by the use of hepatic aloes, a pleasant example of the purity of the ancient wines. He next treats of the wine measures of the ancients, quoting for an authority Dr. Arbuthnot. The "wine-cellars of the ancients" form another chapter. The custom of burying a vessel of wine on the birth of a child, common at this day in Greece, was also, it appears, prevalent at Rome.

Barry then treats of Roman wines, and the wines of the Campania Felix. The description is drawn largely from the poets. The mixture of twenty parts of water with one of wine, is quoted from the ninth book of the Odyssey of Homer, to show how powerful the wine must have been. Such quotations prove nothing. The poet, when he endeavours to extol the strength of the wine, naturally exaggerates, according to the custom of poets at all times. Besides, the Thasian might have been in the case to which allusion is made, a mixed wine, after the sense of the term which the reader will find in Chapter XV. of this volume. Again, in some wine countries of the South, wine is rarely drank unmingled with water, especially in Greece, where the resin and pitch at this day flavour it so intensely. The taking such passages as proof at all, is a fallacy throughout the work.

The "entertainments and suppers of the Greeks and Romans" are treated of at length by Barry, mingled with professional remarks. The triclinia, cups, vessels, and vinous preparations of the ancients all come under review, with the medical and dietetic uses of wines. The author precedes them by his chapter on "the nature and qualities of water," which he introduces with the logical remark in substance, that as water is a constituent in wine, it should have similar consideration. He then wanders from his subject to his own locality, giving a disquisition on its springs and their virtues—a deviation not uncommon with physicians in fashionable watering-places.

The following extract is a specimen of Dr. Barry's style of scientific writing:—"I have long been inclined to think that there is a peculiar quality in that kind of water which constitutes the greatest part even of the

strongest wines, but prevails almost entirely in the weaker kind, which are animated only with a very small portion of a vinous spirit; and therefore, from the nature of it, must certainly possess some qualities very different from those of the common water, which is that of the soil where the vine is planted; and which in that state is first received into the small absorbent vessels of its extended fibres; from whence it is collected, and more digested in the bulbous parts of its root, and thence distributed through the trunk, into its various ramifications; where it must have been almost, if not entirely separated, from all the heterogeneous and terrene parts which it contained, before it constitutes the aqueous parts of the grape; as it is very evident, from late experiments, that the whole size and weight of the greatest tree is owing to water alone. It is likewise remarkable, that the fibres and vessels of the vine are more dry and rigid than of any other tree, and that it chiefly delights in a sandy soil. This water, therefore, originally of the best kind, and passing through the finest strainers, must approach nearer to the unmixed, elementary qualities of water, than has yet been found in any place, even when depurated with the greatest art. This seems confirmed, from the specific gravity of common water being found greater than that of any pure vinous liquor; and though this has been generally imputed to the prevailing lighter qualities of its spirituous parts, yet it seems to be more owing to those of the water."

A part of Sir Edward Barry's volume is devoted to a notice on modern wines. His information upon this part of his subject is very imperfect. He concludes with an account of the "wines used in England," and of the attempts made to plant the vine here; and, among others,

gives an experiment made by Mr. Hamilton, his friend, at Painshill, proving that good wine has and can be made in England, and that such wine has been sold at seven and sixpence and ten and sixpence a bottle.

The work of Henderson is engrafted upon Barry's plan, and a good deal of the substance is taken from it; titles of the chapters, or the general divisions, as well as all worth taking, are abstracted. The volumes naturally differ in the treatment of the subject, the latest having the advantage of the modern discoveries in chemistry, and of that advanced state of knowledge on the part of its author which the difference of the times and a correction of the errors of Barry in the part on ancient wines would naturally cause. This work is before the public; and though it is no part of the plan of the present volume to illustrate modern wines by the very imperfect and glimmering views which can be obtained of the ancient, a few remarks on one or two passages may be made. That the wines of the ancients differed from those most in repute in the present time is clear, although it is very probable that in Cyprus, and the East, there are wines at this day closely resembling the ancient, the most prized of which, as well as the purest, were generally of the sweet and luscious kind. The flavour of wines made in Italy from vines suffered for the most part to luxuriate and grow without pruning, would hardly please a modern palate, especially when mingled with sea-water, tainted with resin, and rendered viscid by the smoke of the fumarium. Yet, as the fumarium was used more to mellow the wines by heat than smoke, and time removed a good deal of the taint, the flavour might not be so objectionable as it appears on the first reflection.

The oldest account of ancient wine that can be deemed

satisfactory, through its leading the reader to understand the quality by any mode of making wine pursued at present, is given by Mago, the Carthaginian, who wrote twenty-eight books on husbandry, and flourished about 550 years before Christ. Barry has preferred quoting verses, to noticing this remarkable passage. The directions given for making the best sort of wine, or *passum optimum*, the rich luscious southern wine of our day, except the use of the pitch, were, in the age of Cyrus of Persia, and in the time of Mago of Carthage, clearly these:—"Let the bunches of grapes, quite ripe, and scorched or shrivelled in the sun, when the bad and faulty ones are picked out, be spread upon a frame resting on stakes or forks, and covered with a layer of reeds. Place them in the sun, but protect them from the dew at night. When they are dry (sufficiently shrivelled), pluck the grapes from the stalks, throw them into a cask, and make the first must. If they have well drained, put them, at the end of six days, into a vessel, and press them for the first wine. A second time let them be pounded (or trodden) and pressed, adding cold must to the pressing. This second wine is to be placed in a pitched vessel, lest it become sour. After it has remained twenty or thirty days, and fermented, rack it into another vessel, and, stopping it close immediately, cover it with a skin." Now, this also was done by Columella, who lived fifty years after Christ, and between five and six hundred after Mago. He prefixes the remark, that "Mago gives directions for making the best sort of wine as I myself have done." Thus the best wine is not a dry wine, nor the best luscious wine only, but the best wine as the luscious wines are esteemed before the dry in the South at this day. Now the best wine in Carthage, A.C. 550,

and at Rome, A.D. 50, must have continued pretty much the same in kind and quality during that interval, notwithstanding the reign of Augustus and the poetry of Horace, or what mixtures the fluctuations of fashion dictated. The reader will be at no loss in this volume to find wine made the same way as by Mago in more than one place in the south of Europe, during the present century. It may therefore be presumed, that the best wine, in the esteem of the ancients, resembled the *lagrimas* of Malaga, or some of the straw wines of France. As to what poets say in favour of any wine, it goes for nothing as to its quality: Shakspeare may extol sherry for the most exquisite, Redi Montepulciano, Prior claret, Boileau Burgundy, Crabbe vulgar port, and Moore sparkling champagne; but this would decide nothing a thousand years hence about the nature or flavour of the wine, and each kind cannot be the best. Dr. Henderson, with his chemical knowledge, and laborious investigation of classical authorities, like a character in one of Smollett's novels, still appears to see the concentration of all excellence in the ancients. The knowledge of the essential properties of the ancient wines is a sealed book to us for ever.

The modern traveller in Greece cannot drink a small quantity of the wine there without water, for the intense headache it excites, owing to the infusion of resin, pitch, and similar ingredients. Substances of the like nature were infused even in the Augustan age, in the dry as well as other wines. Sea-water, pitch, rosin, pine-leaves, cypress, myrtle-berries, bitter almonds, tar, spikenard, myrrh, and other things were used. These, it is evident, were properly "mixed wines," in the sense mentioned among the Jews under that title. It is not wonderful that

Augustus could only drink his pint at a sitting, even when mingled with honey! A modern wine-drinker could hardly manage half as much of such a mixture, without sickness, any more than the emperor. These wines, from all that can be now gleaned respecting them, were little entitled to the praise of purity. There seems to have been in all ages a tendency to render the juice of the grape stimulant and injurious to the constitution. The Persians infuse poppies in their wine at the present day, and the English generally give the preference to those wines which are unnaturally mixed with the largest quantity of the product of the still. Dr. Henderson seems so much aware of this in praising ancient wines, while agreeing that no wine deserves to be drank which is not the unadulterated juice of the grape, that he palliates the practice, by observing in substance, that a taste in wine varies, and is at best an acquired one. This is hardly correct; a taste for pure wine is natural. A child will drink pure wine, but not wine and pitch—the union of the two would yield a flavour only to be relished by an acquired taste. A difference of flavour in pure wine is not against my argument. If it were the fashion to mix saltpetre with coffee, though its becoming the fashion would immediately make the nauseous mixture, in what is called fashionable life, the most agreeable in the world, the coffee would not, *de facto*, be less adulterated, or the fashionable taste be less an acquired and depraved one on that account.

Every rational person must admit, that to judge the modern by the ancient wines, without knowing more of them, which is impossible, is only not the greatest of absurdities. Dissertations, however inconclusive, may amuse the

individual of fortune, who has leisure to bestow on speculations of the like nature; and the being carried, as Dr. Henderson observes, through the pages of Cato, Varro, and Columella, as it were into the midst of the pursuits of the ancients, is pleasant and agreeable; while it is true, the agricultural operations they describe, we can understand, but of the flavour of ancient wines, the colour and spirituous strength, we know nothing. Barry might be of opinion that the wine given by Ulysses to Polyphemus was Thasian, that Maronean is a misreading, because it made the giant drunk so soon, and required twenty-four parts of water to make it palatable to any but a giant; while some other writer, who eschewed luscious wines, might think it of the dry class, because the disorder in his own stomach produced by sweet wines was somewhat slower than that from dry, and the stomach of Polyphemus seems to have been most rapidly and effectually agitated. Life is too short to waste in this kind of guessing and trifling.

Barry has a statement respecting the enormous produce of ancient vine land, which is remarkable on several accounts, as well as for showing how much the ancient writers differ on the simplest things, and how hard, in consequence, it is for the moderns to obtain the truth on very plain points. Varro says that a *jugerum*, less than an English acre according to some authorities, had been known to produce "ten, nay fifteen" *culei* of wine (from ten to fifteen is a great leap), and then adds, that Marcus Cato says, a certain piece of land repeatedly gave ten culei. Varro then writes, that the same quantity of land near Faventia usually gave three hundred amphoræ of must, and was thence called tricenary, a term by the by bestowed on

vines *(vitis tricenarii)* that produced thirty measures of wine. Columella, evidently thinking this incredible, remarks, that such was unquestionably the case in *former* times (some modern writers apply the word in the same sense to things which are contradicted by modern experience—the word ancient or former being remarkably convenient), but *now*, he continues, at the residence of Seneca, not fifteen nor ten, but eight culei, were no uncommon produce for each jugerum. He then observes on the astonishing exuberance of the Spanish vines, where seven culei had been obtained from eighty stocks of two years' growth, and a single vine had produced two thousand bunches of grapes. In respect to Spanish produce, even now it must be great, if the reader will turn to the Chapter on Spain, in this volume, and see what an abundance of grapes is gathered near Malaga annually; but then there are three gatherings in the year, which neither Varro nor Columella mention in Italy. Now Varro is extolling Italy, and evidently placing her in rivalry with Greece, and his statement, after all, is but ten culei, and in Columella's time only eight could be cited as fact. In determining similar questions, it should always be inquired, whether it be more likely that a writer exaggerates or is mistaken, or that nature has changed. Common sense supplies the answer to this question. In such matters it is always the safe side to adhere to universal experience. A district may change in fertility, and oftentimes the change be caused by some recorded calamity, but men will be found rather to neglect culture, than nature to forsake the soil of an entire country. It is probable both Italy and Spain possess in the aggregate as fertile a soil as ever. It may be questioned if the latter country does not produce more than ever, when, for

purposes of commerce, it is diligently cultivated. The Axarquia is as rich as it was in Columella's day, there can be no question. Vines are now pruned, and even the buds taken off, to improve the quality of the wine, disregarding the quantity. A vine is not suffered to run wild, and produce an exuberant quantity of fruit, and in consequence a weak must, which requires pitch, resin, and other ingredients, to prevent from turning acid, as must from wild grapes soon does; and as it soon will, however carefully managed, from cultivated vines which are allowed to run at large, and give out fruit at random to their full bearing. Modern science has taught a lesson to its children in the better manufacture of wine, if not partaken at the enviable symphosia of Plato or Xenophon, the myrtle-wreathed suppers of Horace, or around the carved bowl of the immortal Mæonides.

Barry says, a British acre, at fifteen culei, would produce forty-five hogsheads. Henderson says, fifty-four hogsheads and a half, no trifling difference; both cannot be correct. The latter remarks, that Columella deemed the estimate of Varro exaggerated. Columella's experience, it is to be observed, relates to one of the most fertile spots on earth. Neither Drs. Barry nor Henderson, it is presumed, were acquainted with the returns of certain vineyards in France. The earth has not, as respects quantity, materially changed in what it gives out in culture at least. The Hampton Court vine has produced in one year two thousand two hundred bunches of grapes of a pound weight each, or two hundred more than that quoted by Columella, who does not say what the grapes weighed. One branch of this vine is one hundred and fourteen feet long. At North Allerton, in 1585, there was a vine that

covered one hundred and thirty-seven square yards, and was then a hundred years old. A vine at Valentines, in Essex, produced two thousand bunches of a pound each, and covered one hundred and forty-seven square yards. The average of a province is no scale for a particular vineyard, nor does the must of the grape increase as the south is approached. At least this is by no means the rule. The entire department of the Seine and Oise, a part of France some portion of which is north of Paris, averages 1373·480 gallons per hectare, or every two and a half English acres. But the wine is weak and will not keep long; the pitch or resin of the ancients might perhaps give it endurance. It appears uniformly that where the quantity of must given is very great, it is generally weak. In the Meurthe, where the average product is but $50{\cdot}64\frac{5}{6}$ hectolitres, from a hundred and fifty to two hundred hectolitres per hectare are frequently the produce in certain spots, yielding the almost incredible quantity of two thousand one hundred and twelve, or 2112·0282 gallonse ach acre, according to the well established statement of M. Thomassin, curé of Achain. Now eight culei are one thousand seven hundred and forty-five gallons, and ten about two thousand two hundred and eighty-four. The wines thus produced are the commonest and most ordinary in character, yet still they are from vines not allowed to run at random, nor give the utmost quantity of fruit. Therefore, that vines in a certain spot in Italy should produce eight culei, especially where the amount of produce was the sole object desired, though the quantity is large, does not seem, all things considered, so very wonderful.

Both the authors above-mentioned have dwelt on the medical effects of wine and its dietetic qualities. These

are so well known, that they need not be repeated here. It would never be thought, that before 1581 the English were noted for their sobriety. There is one distinction should be made, respecting the abuse of wine, in the character of a modern people; this is the separation of inebriety by wine from that produced by agents not the product of vinous fermentation. There are few individuals comparatively, among the intemperate, who can lay the fault upon wine, in this country, if the pure juice of the grape be understood by that term. It is the produce of the still, mingled with wine, that operates the mischief, when wine is concerned at all.

The northern nations have always drunk hard, and those who least approach the habits of the more civilized, have been most remarkable for this vice, while in the more civilized countries the lowest orders of the people have been most habituated to it. In wine countries, people mix water with their wines, and when they drink them pure, take them in moderation. Their wines have no more than the natural alcohol, and wisely used prove a blessing, as they did to old Cornaro. In no country are the effects of ebriety more fatally visible than in our own. There can be no doubt that in a northern climate, a moderate quantity of pure wine acts beneficially on the constitution, except in certain habits of body, where the most trifling stimulants are injurious. In all ages of the world, in sacred and profane history, the abuse, not the use of wine, has been condemned. It is painful to reflect how much this abuse has converted what is naturally so generous into an evil of no ordinary magnitude; so difficult is it to mark the limit of rational enjoyment, even in the best things. The practice of drinking largely of wine has much decreased of

late years, and though "Attic taste with wine" may be a union as rare as before in any class of society, it is certain that wine was never less abused by consumers than in the present day, nor excess more generally avoided.

It would be trespassing on the ground of those who have so well described the effect of wine on the human frame, to say more on the subject here; especially as it is generally well understood. It is safest to drink the French wines, and to take all wine pure. French wines are rated first in wholesomeness. Next come the wines of the Rhine. After these sherry, port, and Madeira, when sound and free, if they ever are free, from the destructive influence of unblended alcohol.

The vine was once cultivated in England, and this might be done now, were it not that other productions of the soil are more lucrative. There is no doubt but a wine equal to that of the Moselle might easily be made, and that every two or three years a vintage sufficient to remunerate the grower might in certain places be perfected; but the uncertainty of the climate, and the cheapness and superior excellence of foreign wines, would hardly allow a British wine, of little vinosity, the chance of competition. Dr. Barry says, some of Mr. Hamilton's wine was thought superior to the best champagne. The grapes used were the Burgundy, cultivated in the French fashion.

The wines used in England in former times have been traced in other works upon the subject. It would be foreign to the nature of this volume, and occupy too much room, to speak of them here; besides, they comprised the Italian, Spanish, and even the Greek wines, as well as the French. "Malvasia, romenay, osey, bastard muscadelles, and other sweet wines," once came to England, according to a docu-

ment relating to the royal family in 1469. There were two Greek towns, called Napoli di Malvasia, and Napoli di Romania, from whence the wine called Malmsey in England was originally exported, before the Turks occupied the mainland of Greece. After that event, Candia was the place whence they came, even after that island fell into the hands of the barbarians. Pietro Quirino, whose shipwreck is so singular a record of the times, had eight hundred casks of Malvasia on board from Candia, when he was lost in the North Sea, in the year 1431. The "wine of Tyre," the Helbon wine of Ezekiel, made near Damascus, was imported here in the reign of Richard III. by Venetian vessels, which were bound to bring with each cask ten yews for bows: yew abounding in the Levant. Nearly down to the revolution of 1688, French wines were imported in the largest quantities, even to the extent of twenty thousand tuns a year. Heavy duties upon these, and the Methuen intrigue and treaty, introduced a baser article, and drove out the wines of France. Since that period, the wines which have come into this country have been three-fourths Portuguese and Spanish. The change has not been for the better in the encouragement of the brandied wines of Portugal, at the expense of those of a worthier character.

I may be charged by some, particularly those who from habit are advocates for spirituous wines, with too great a predilection for the wines of France. I do not think I have in any case exceeded the limits of fair comparison. Wine, let it be of what quality it may, whether abounding in alcohol, or weak in spirit, if it be the pure juice of the grape alone, after due fermentation, is that to which I confine my meaning when I use the term "pure wine." It

cannot be admitted, by any reasonable person, that a pipe of wine, in which a dozen gallons of brandy are mingled, and perhaps other substances, can be tolerated as pure wine. If any prefer such a mixture, they may follow their own taste, but they have no right to impugn my selection until they can prove it wrong, until they show impurity to be pure. The French wines are among the best and purest, and the German and Hungarian wines, besides their truly vinous qualities, are among the most delicate and perfect in character. I have been governed by truth, and not by predilection, in making them the superior in every possible sense, and, therefore, I do not think I am wrong. The love of brandied wine, and spirit of all kinds, is too much gaining ground in this country. Whether foreign spirit be taken mixed with water or wine, the effects are the same on the wealthy user of them, as those of the British still upon the poorer classes, and the injurious consummation will in both cases be very little protracted.

France has supplied the want of information respecting her unequalled vinous productions by suitable details of acknowledged merit and accuracy. These are given here geographically, or departmentally, where the wine produce is worthy of notice. When other nations follow her example, something like an accurate account of the vine and its products may be written, which will contain every minute particular of this branch of agricultural science for all nations. There is reason to think that the dissimilarity between the mode adopted both in vine culture and in the vintage in various countries, is already ascertained pretty near the truth, and that the differences are not greater any where than will be found described in the following pages. It would be well if the same approximation to truth of

description could be attained with respect to the quality, properties, and flavour of the products of the vintage, a thing, however desirable, it is to be feared impossible in the execution. France yields the standard by which all wines may be classed in their relation with her numerous varieties. From her weak northern products near the Moselle, to her rich luscious powerful wines of the south, among which, it is probable, there is no variety in the world which might not find an approximation to some one or another of her growths, a classification might be adopted. The roughness of port, the lusciousness of Cyprus or Syracuse, the dryness of amontillado, the endurance and flavour of hock, and the sweetness of lagrima, may be all found among her wines, respecting many of which, in England, as little is known as of Shiraz. In an attempt made, upon French authority, to classify wines generally under their respective heads in the Appendix, it would have occupied too much room to carry the wines of France down to the sixth class, as it is not probable that any beyond the third will be imported into Great Britain, and the varieties are exceedingly numerous. This classification will serve as a general guide in all cases, and may be rendered more perfect, as the intercourse between the two countries, and a more liberal commercial exchange shall familiarize the public with those rich productions of the soil.

My endeavour has been to render myself as intelligible as possible, and to refrain from useless detail. A volume might be filled with the accounts of the vine itself, its varieties, and different modes of cultivation. This part of the subject has been compressed. While the best growths of the various wine countries are given in such a manner that the gentleman on his travels for pleasure, or the

merchant during a professional journey, may know the spots most eligible to visit, either from curiosity or business. The prices of the wines in France particularly have been annexed, drawn up from the mean of several years. It is obvious that the prices of one year, in a work like the present, would be useless, the mean has, therefore, been fixed from returns made in the department, and will be found an approximation to the vintage prices for a series of years. In France, of late, every statement relative to existing agriculture has been rendered nearly accurate by the advanced situation of the government surveys. In other countries nothing like the same accuracy of detail, in fact, statements of a very general nature, collected from a variety of sources, and it is to be feared not usually very authentic, are all which can be obtained. I have avoided, as much as practicable, the use of foreign terms without explanation, because a volume of the present kind cannot be rendered too intelligible to the greatest number of readers.

I cannot look back without pleasure to seasons spent in the lands of the vine, not in the town, but in the heart of the country, amid the cheerful rural aspect and scenes which of all others, at parting, leave the deepest regret in the heart. In 1816 the grapes, in many places in the middle vine districts of Europe, remained ungathered from the badness of the season. After shooting in vineyards, where even in November the fruit hung neglected in many places, I witnessed the disappointment of the laborious vine cultivator, and the sufferings of the agrarian population, of which, except in vine countries, little idea can be formed. The vintage is immemorially an ancient jubilee, of which, when as is rarely the case, there is no joyous celebration, the toil of the labourer becomes doubly onerous,

the bosoms usually cheerful are oppressed, and the gripe of poverty clutches its toil-worn victims with redoubled violence.

In the present volume, confined wholly to modern wines, I have no intention of trespassing upon the ground of other writers. From some, indeed, little was to be learned. I have endeavoured to compose a book divested of that abstruseness, and that mixture of ancient learning and scientific terms, which renders Dr. Henderson's work so much complained of by the general reader, for whom evidently it was not intended by the author. Though few works seem more laboriously corrected, there are inaccuracies in tables at the close of his volume. The estimates of the French vineyards and wines are wrong. In the wine measures, the errors are numerous and inexcusable. A common English gallon is stated as 3·3788 litres. The form of the table was convenient, and I borrowed the decimals of the litre from it, p. 67. When I afterwards made out a table with the imperial gallon, resembling that in form to which I refer, I found it full of mistakes, and had unluckily printed off the erroneous calculation, which the reader will correct to 3·7860, instead of 3·3788 [1].

The authors whom I have consulted are numerous. To Bacci, Crescenzio, Serres, Clemente, Salmon, Fabbroni, Dru, Dussieux, Cavoleau, Choiset sur l'Appareil de Gervais, Barry, Chaptal, Jullien, Lebat, Redi, Mariti, Labaud, Berneaud, Cours Economique, Tavernier, Columella, Ulloa, Bright, Du Halde, Inglis, Harris's Travels, Gay Lussac, Bowditch, Maculloch, and others, I am deeply indebted. The ornaments of the simplest character, that

[1] This has been remedied in the present edition.

I could myself design and sketch, one or two of which are from the antique, were cut by Mr. Baxter, of King's Square, in a manner with which the reader cannot but be satisfied, as any deficiency he may discover must be applied to imperfection in the designs, not to the graver of this artist.

This volume will, at least, guide the reader in the search for good wine, and tend to confirm the preference for what is really excellent. It was my intention to have added a list of proverbs on wine, and certain aphorisms connected with it, used among different nations, but the matter in this volume has already grown to a length too great to admit of any addition being made to it.

C. R.

South Lancing, Sussex,
July 18, 1833.



PREFACE

TO

THE SECOND EDITION.

A SECOND EDITION of this work has been required in little more than twenty months after the first; nothing could be more decisive of its favourable reception. The present volume contains additional matter; various corrections have been made, and the price has been considerably reduced by using smaller type. The author did not intend to add any thing more to this announcement. The public press, on the appearance of the first edition, honoured him with notices highly flattering to his labours; these best explain what their value may be, while the book itself is the clearest expositor of his motives. It has come to his knowledge, however, that individuals interested in the Port wine trade have considered he has done injustice to the merits of this wine. He has been charged with depreciating port, and laying upon the Oporto wine monopoly, the burden of evils existing only in his own imagination, seeing that the monopoly has now been for some time destroyed, and that, whether the monopoly exists or

not, the wine of Oporto is the proper wine for this country.

The common sense of the public shall not be insulted here by any assertion, that duties to favour one nation at the expense of all others are wise, honest, or beneficial. The wines imported must be paid for by exported manufactures of some kind, either in direct interchange, or by a more circuitous operation. Wool has no claim to a protection in export over iron or cotton. Such a distinction is an injustice to consumers; it obliges them to pay a high price for what they purchase, and it encourages monopoly. Right principles must finally prevail in commercial legislation, and baffle the caprice or predilection of a minister. In the present instance they have triumphed, and the country confesses its obligations to that clearer insight into the principles of trade, which made government abolish the Portuguese monopoly. The act conferred high credit upon our rulers, united as it has been with an equality of duty upon all wines except Cape. It decided that just principles were bringing into action by government in commercial affairs, and gave well-grounded hope that the system thus acted upon will be carried out when the resources of the state may permit. It is of great importance to have right principles acknowledged by those who rule,—retractation becomes impossible, and time will effect all that is desired. But, although the Methuen Treaty is no more, can the same be said of the system it organized, of its spirit, its old habits among mercantile men, its ill treatment of the vinous product, its local influence, its predilections, and its struggles to maintain prices by capital previously invested? The preference for Port wine in England at first, not because it was the best wine, but because it was comparatively low in price, has, from the inveteracy of habit, rendered a proper examination of the simple question—what "qualities really constitute good wine"—impossible to be considered. The predilections of a century are in its favour. Time alone can alter these, and

direct into another channel the capital now employed in sustaining the monstrous prices of Port wine. At present the wine of Oporto is the standard by which Englishmen judge of all other kinds, although at best but a second class growth injured by bad management.

The effect of the monopoly was two-fold; it depreciated the wine itself by blending together vintage after vintage, and burying merits and defects alike in a sea of brandy, because "quantity pays better than quality," and it raised the prices of the wines exorbitantly—wines Englishmen were forced to drink, or swallow none. Thus imitations of Port wine were rendered worthy of study, and importations from France of wines as good if not better in some qualities than Port, were effected under that name by transhipping, while the heavier duty on French wines was evaded. I shall first proceed to show that very large quantities of wine have been received into this country and drunk as Port, without the discovery of their origin; and, secondly, I shall touch briefly upon the consequences which will ultimately follow this knowledge and the equalization of the duties, for to this last measure will succeed changes in commerce as respect wine, which are very far from being apprehended in all their extent.

The political world is not that alone to which reform is confined, a corrupt system of commerce must undergo the same ordeal. When long established monopolies, and the mischiefs they generate, become prejudicial to the consumer, changes cannot be remote. The Oporto trade was long an injury to the people of England. The concentration of British capital, and the unwearied activity of British merchants acting in the Company, succeeded in raising the wine from six or eight pounds a pipe, to between forty and fifty, in little more than half a century. It was not any fresh demand on the part of the consumer, making the commodity scarcer, but the mercantile management of the

market, that caused this increase of price. When commodities can be sold or withheld at pleasure, their price is not the natural value of an open and fair market, it may be more properly styled the factitious cost. That which is bad or unsound in the *morale*, as the French say, may flourish for a time, but it is liable to be destroyed on the occurrence of contingencies that seem in themselves very insignificant. The basis for all transactions which are to endure is the rock of right principle.

The object of the author is a public one. Every merchant must know that what benefits the public, benefits himself. In advocating the cause of the public, the author therefore supports the best interests of the merchant. The public have a right to candid and honourable dealing; and now, when all foreign wine countries save the Cape, are open to England at one rate of duty, it is proper that every wine should be rightly designated, that every variety should come openly into the market, and that Englishmen should be able to choose for themselves, not drinking wines of Cette, Beni Carlos, or Roussillon, as Port, but for what they really are, whether in respect to merit or price. It will be right, before proceeding further, to show to the world, what no one concerned in the wine trade can gainsay, that we have been drinking in this country for a long time the wines of other countries as Port wine; such wines entering under that appellation and rate of duty.

No wine, from its coarse character, is so easy to imitate as Port. Wines under that name have reached England even from Bordeaux. There is nothing like coming to facts. If the case be proved, then no one will contend that there would be any difference in the flavour of the wine if it were called by its right name, and we returned to the path of integrity and fidelity. The reader will take a good-sized map of France, and finding Marseilles, trace the Gulf of Lyons to Cette, and from Cette a hundred miles

further west or south-west, he will see the small harbour of Port Vendres, situated near Cape Creux, at the base of the Pyrennees. Doubling Cape Creux, he will discover, but five or six hours' sail distant, the little bay of Rosas, in Spain. Now, wines for England were always designated "French" by law, if they came from France, in order to secure the high rate of duty attached to them. The very same wines coming from Spain, as Spanish, were only liable to a duty, from 1786 to 1793, of 32*l.* 16*s.* 6*d.*, while French wines paid 49*l.* 14*s.* $4\frac{16}{20}d.$ per tun. A house at Bristol, for years before and up to the time of the French revolutionary war, drove a thriving trade by getting the wines of Roussillon from Port Vendres into Rosas, and then shipping them to England. The warehouses used for this purpose are yet in existence. These wines, as good or better than those of Portugal, during the monopoly were purchased much cheaper; for the trade in them was no monopoly, and consequently a very large profit must have accrued upon their sale. The house of Ireland, of Bristol, was among the parties that carried on this commerce. Under the absurd monopoly system of Portugal, the trade was perfectly fair, although the passing off such wines to the public in England, as Port wines, was not just. The war ended this traffic; but something very similar has been carried on through Cette since the peace. In Dr. Bowring's Report on Wines, it is stated that factitious Port, Sherry, and Madeira, are prepared and brandied for exportation through Cette. Now, really good wines of the south of France need no disguise, they have every quality of pure wine, and a vinosity superior to Port.

The Frantz Gustavus Oscar, chartered for "*London* or Brazil," left Cette for Oporto, with some hundred pipes of wine, in November, 1833, for a house the name of which is known to the author. This was her *third* voyage in the same trade within no long space of time. The trade of Oporto to the Brazils has been

ruined. There were sent from Oporto to Brazil, of Port wine, in—

1827 . . .	7,410 pipes.
1828 . . .	9,585
1829 . . .	6,212
1830 . . .	3,568
1831 . . .	824
1832 . . .	434
1833 . . .	131

In 1831, France shipped to Brazil 4,500 pipes, and has been increasing her shipments every year since. Nay, in that very year, her total exports were 152,000 pipes.

The exports from Oporto to the Channel Islands touch another of the author's positions, and abundantly bear him out in his statements. There were shipped from Oporto for these Islands in—

1826	pipes 38	Imported into London,	293	pipes.
1827	— 99	——	—— 99	—
1828	— 73	——	—— 75	—
1829	— 0	——	—— 90	—
1830	— 0	——	—— 147	—
1831	— 0	——	—— 143	—
1832	— 0	——	—— 263	—
1833	— 0	——	—— 862!	—

Now why all this shuffling, if the object be not to introduce a commodity purchased cheaper, in place of a dear one, and when the customs' entry demands wines grown in France to be entered as French, to take them to another port, and tranship them there as wines of Portugal! When the difference of duties existed, the revenue loss was very great. In 1812, about 135 pipes and 20 hogsheads were exported from Oporto into the Channel Islands, but

2545 pipes and 162 hogsheads were imported from these Islands into London, the duty being then 11*s.* 5*d.* French and 7*s.* 7*d.* Portuguese per gallon, the difference exceeding the cost-price of such wines. It is very certain Guernsey and Jersey did not grow these wines. Thus if legislators follow a tortuous policy, or keep up unwise restrictions upon trade, its spirit is certain to baffle them, even with an army of excisemen at their beck.

Constant importations of wine from Hamburgh and from Amsterdam into London have taken place, no less in some years than five hundred pipes. It is true there has been wine sent directly from Oporto to both these places, but it is not less true that France has exported to both places annually above a hundred times the quantity which Oporto has done. French wines have been brought into London from Holland as Port, in instances known to the author, and why not in cases unknown to one whose sphere of observation has been very limited? No less than 24,000 pipes of French wine entered Hamburgh in 1831, and 10,000 were received into Holland. It is well known that London brokers have offered French wines for sale in London, by way of Oporto, as Port wines.

By the decree of Don Pedro of the 3d of April, 1833, a duty of twenty per cent. *ad valorem* allowed the import of all foreign wines. There is nothing to prevent vessels from any port whatever touching at Oporto, which, since March 22, 1834, (see Appendix, No. XIV.) has been declared a free port. Between the 3d of April, 1833, and the 6th of March, 1834, the return of imports included 586 pipes, 72 hhds. 96 qr. casks, 339 barrels, and 2636 garrafas of such wine. Cette port wines of French assortment may be transhipped at Oporto for England, as well as the native growths, and certainly may be sold even coming through Oporto at a much less price. Let not the public deceive themselves, or be deceived, upon this point. Cautions are issued by merchants against "spurious ports."

All these things prove the necessity of a great alteration in the commerce in wines, the principle of which will be that every wine shall bear its true designation. To this the good sense of the public must aid, by not declining wines for their name, but their demerits' sake. If the enduring, full-bodied wines of Roussillon were drunk as port in 1790, and thought good ever since under the name of Port—if Port wine has come in from the Channel Islands that has never been in Portugal at all—why should not such wine drink equally well without a false designation, or a hue of fraud being attached to it, when the prices are no higher than those of Port ought to be?

The author stated, in the first edition, that France is able to manufacture, "within her own limits, every description of wine." This was not said lightly: the English know nothing of two-thirds of the wines of France. From Moselle to Malmsey, from the meagre *ordinaire* of the north to the rich muscadines of Rivesaltes and the vinose, full-bodied, deep-coloured, lasting red wines of the south, some are found as much superior to Port wine, and as much resembling it, as wines well can do. Was it to be supposed that those wines were only to reach this country through Oporto, and that their real denominations would be for ever concealed? The thing is preposterous. Cheaper, purer in respect to vintage, and deeper-coloured, there are wines of France that will become most formidable rivals to the Portuguese. At this moment indeed the secret has been blazoned in the Masdeu, which is a Roussillon wine, and wants only age to perfect qualities fully equal to any Port wine, while in vinous merit it is superior. The reader who will examine the climate of France, and consult this volume on her immense wine produce, and her skill in the growth of wines, will perceive that the author has in no case exaggerated her varieties or capabilities of production.

In 1688 we imported 30,000 pipes of these and other French wines. A tax equal to nearly double that on Por-

tuguese wines was laid on, and in 1697 only four pipes were imported. The author has the utmost confidence in the operation of common sense upon the people of England in this respect, and that strong, full-bodied wines, of good vinous principles, and the delicate growths of the Gironde also, will again extend in consumption, and reduce that of the coarser wines of Portugal, as soon as our habits can be operated upon in a beneficial manner. Their superior cheapness forced Portugal brandied wines upon us, and the same sort of reaction will take place against the wines of Oporto in the end.

In the last edition of this work, written in 1832 and 1833, it may be seen that no less than twelve thousand hectolitres of Roussillon wine went into Spain, or had gone there annually since the peace; corroborating in some measure a trade like that of 1790. This quantity, too, or 316,000 gallons, most probably found its way annually into England from Spain, as Port wine, paying Port duty until the duties were equalized.

It is natural that when the quantity of Oporto wine was tripled or quadrupled in price, while the quantity grown or sold was not increased, an advantage should be taken by speculators to substitute wines equal in quality, and purchased at one-third of the price of Port. From France this was easy when hostilities did not exist. When they did, Spain supplied wines that mingled with Port, in the proportion of two-thirds, so that the system could be still pursued. As if it were not enough that prices should be raised, as respected England, and not other countries, by the Oporto Company, the government of Great Britain allowed that of Portugal to levy a tax for the Portuguese exchequer, of nearly four pounds sterling a pipe, in the shape of export duty, over and above the tax paid into the British exchequer. Verily the public here were taxed enough in four times the true cost of the article at

one period, without paying as well for the trappings of the court of Lisbon. (See Appendix, page 370.)

In 1753, or about that time, a pipe of port wine cost 2*l.* 16*s.*; there were 26,000 pipes imported into England. The Methuen treaty had then lasted fifty years, and the wine was slightly brandied to what it has been since, as there is tolerable good reason for believing.

In 1756 the Company was formed, and the price rose to 12*l.* and 14*l.*, no larger quantity being imported than before.

In 1798 and 1799, no less than 48,000 pipes were imported, and the prices varied from 14*l.* to 18*l.* a pipe.

From 1830 to 1835 the average importation was only 26,100 pipes, or just what it was in 1753, and a little more than half what it was in 1799; and yet the price was from 32*l.* to above 40*l.* per pipe shipped! Now the dullest intellect that ever walked the surface of the earth without a leader must see that this is the effect of monopoly, speculating upon a forced national predilection. The Portuguese emancipated colonies take little or none of her wines, as they once did, for France supplies Brazil; but some years' stock of port is always hoarded, and there is no decline of prices.

Of the enormous overcharge on wine, effected by the Company and the monopoly, out of all ratio with the value of the article to the consumer, the following will afford some idea:

A pipe of good Oporto shipped £40 0 0

English duty, 5*s.* 6*d.* per Imperial gallon in addition.

Now here is the cost to the home merchant of an article not worth more than 12*l.* sterling. Deducting that sum from 40*l.*, we have the enormous expense to the public of 28*l.* over and above the sum to be added by the home merchant for freight, dock charges, interest of money, bottling, and profit.—Really Port drinkers, who were using the cheapest article they could procure, were paying enormously

"dear for their whistle." It may be said that the grower raised the price of the wine to the merchant, from the natural increase of rent upon him. This may be true to a certain extent; but it must be recollected that it was the capital of the monopolist that enabled the landowner to raise his rent. In proof of this, let us see how a pipe of a so called "port" wine, from a finer and richer country, will tell, or suppose it be a pipe of Roussillon. The price is 12*l.* only; the duty the same as Port: just 28*l.* of difference shipped.

Now it is easy to discover from this the species of agent that will bring down the Port monopoly, and at the same time enable the reader to guess the profit on Guernsey, Hamburgh, or Amsterdam ports, when, on one pipe, 28*l.* difference accrues in the cost prices. Port wine ranged from two shillings to two-and-sixpence the bottle, anterior to 1756. At twelve pounds a pipe it could be sold at this price still. The country of its growth is glutted with wine; its exports are diminishing, and other wines are substituting for them abroad, and yet the prices are as high as ever they have been.

To repeat a little in substance. When Oporto wines were only from seven to eight pounds a pipe, or in 1727-8-9-30-31, the imports into Great Britain were 13,385 tuns of two pipes each. In the five years ending with 1822 they were 252 tuns, or 504 pipes less. During the French war, when the wines of that country were not attainable in England, was "the high and palmy" state of the Portugal trade. In two years, the Oporto exports between 1801 and 1815 reached 55,000 pipes. Since that year they have gradually diminished as the general exports of France have increased. It was natural to suppose, therefore, the wines would decline in price, and they would do so had the trade always been an open and fair one.

The author finds pleasure in discovering himself indirectly corroborated in opinion respecting the existing spirit

of the Portuguese monopoly, and its consequences, by a circular of the very respectable house of Messrs. John Reay and Co. of the city of London, dated in 1833. It states that

"The prices of the British factory of Oporto, as well as of the Royal Wine Company, in the years 1797, 1798, and 1799, were from 14*l.* to 18*l.* per pipe, on board, at the usual credit of nine months, &c.

"The shipping prices charged at Oporto, in 1830, 1831, and 1832, were from 32*l.* to 40*l.* per pipe for the same classes of wines; and the export from Oporto, at the first of the two periods named, was considerably the greatest. Whatever causes operated to create the advance from 1799 to 1832, there seems to be none for the continuance thereof."

It then goes on to state, that allowing Don Pedro's war to have wasted from 15,000 to 20,000 pipes, at least seven years' consumption for the United Kingdom remained in Portugal and England. The opinion of Messrs. Reay was that the shipping prices must decline. This was a rational expectation; but the capital, habit, and management of best part of a hundred years is not to be quickly altered; the fall in Portugal wines will be tardy. The accumulation of wines will be supported to the last possible means by the capitalist, till distress forces on the measure; he will die inch by inch. If he baffle conjecture in his resistance for a time, the fall will ultimately come, and other wines will drive those of Portugal out of the market, in so great a degree as to quicken that inevitable event.

To place in a clear point of view the monstrous legislative blunder, which abstracted enormous sums from the pockets of the public for the last thirty-five years alone, it may be proper to examine what England would have paid for her Port wines, had not the monopoly existed. There is no reason to believe, that as the wine of Oporto before 1756, realised from four to seven pounds a pipe,

the consumption not materially increasing, it could ever have got above twelve pounds; ten pounds it is probable would have been the maximum. Now our imports of Port wine from 1801 to 1835 inclusive, did not much exceed those from 1765 to 1800, when the wines realised between fourteen and eighteen pounds. The average may be taken at about 30,000 pipes, which at twelve pounds per pipe, would be 12,720,000*l.*, the utmost that would have been paid in the last thirty-five years. Instead of that sum, the public have actually paid 38,160,000*l.* sterling, reckoning the average prices at 36*l.* per pipe. It must be acknowledged, that 25,440,000*l.* was a tolerable sum to throw away—it was a noble bounty on the exportation of a little coarse woollen cloth! Now, the wisdom of our rulers has equalized the duties, yet the wines still retain high prices. Such is the effect of our national disposition to take things for granted: thus are we duped, because we fear to exercise our reason in the teeth of ordinary custom. The author trusts the lesson will be a useful one to every man in England, who reflects that the interest of the sum thus extorted by monopoly would take off annually a million and a quarter of our taxes.

The foregoing statement naturally leads to the inquiry, whether wines that have been drunk in this country as good Port, will not be consumed under their own names very soon, at half the price of Oporto wine. There can be little doubt but they will. The alteration and equalization of the wine duties is effecting important changes in the trade. If we drink the wines of Roussillon or the Herault as Port, *viâ* Oporto, or the Channel Islands, we may as well drink them rightly designated, at a third the price we pay for their Oporto titles. The merchants must be prepared for this change, and very soon too; for the wines of the south of France are already here. They must soon extend the varieties of their shipments, and suit every taste and every degree of cost which a public emancipated from the influence

of a long-standing monopoly will not fail to desire. The capital at Oporto kept up prices; but it cannot arrest a course of events which is irresistible. With cheaper and more vinous growths from France, or any other country, the habits of Englishmen will change too; it will be singular, indeed, if they do not.

Wines quite green, the undoubted growth of Portugal, have been offered lately for sale "assorted," and hurried away without due amelioration. This looks as if pressure were even now partially occurring somewhere. Such wines will not bear a moment's comparison with the rival growths to which I have alluded as coming in from the south of France, when the latter obtain age. In fact, the Oporto wine trade must decline, and perhaps more rapidly than even the author of this volume anticipates. The evils of the domestic war were quickly recoverable; those of the monopoly never can be; too much capital has sustained them.

It may be said that sherry wine, about 1799, was only from fifteen to twenty-nine pounds the butt, and it is now from thirty to fifty-eight. This is very true, but not deciding whether there has been a demand raised artificially or not, it suffices that sherry becomes for a moment the fashion. Not only so, the importation of Spanish wines, free from any monopoly, has increased from 1,401,960 imperial gallons in 1799 to 2,246,085 in 1834. Now, the port wine imported in 1799 was 48,600 pipes, and in 1834 only 23,138; and yet the price at the latter period has doubled upon the former. Sherry has risen with a rapid demand; port has risen, with a rapid decline of its consumption. One is a natural, the other an unnatural course of things. The truth is, the consumer's pocket has been getting restless under the monopoly; it has been struggling to unite the convenience of economy under our heavy taxation with a rightful freedom of choice.

The author hopes that rivalry will soon produce a competition for excellence in the wine trade; a real endeavour

not to force one commodity in the largest possible quantity into the market, but to give a choice of the best of every variety. To the merchant the advantage will be equally great; for whatever renders a commodity cheap, extends its consumption, enlarges the limit of trade, and increases the aggregate profit, rendering less capital effective. It is too true, that the Oporto people must suffer; but there is no remedy, and they must make up their minds to meet the crisis. A long period of exclusive advantage to a few is the worst reason that can be advanced for the continuance of any similar system. If, to quote a trite proverb, they "did not make hay while the sun shone," that is their own affair.

Let the wine-merchant at home look to it in time. Those who have penetration enough to foresee the inevitable issue of the recent changes, will be foremost advanced under the new circumstances. It is the employment of a sagacious forecast, combined with determined action upon results, which some wedded to the customary mode of business will not credit until they actually occur, are incredible to others, and will be seen too late by the obtuse, which will bear away the palm of success. If, knowing what most wine-merchants do know in the secrets of trade, to which the author has alluded, any suppose the same traffic can much longer exist, they are mistaken. The temptation to call wines by fraudulent names is daily diminishing, and the common sense of the public will find out the rest; a little time only being required for that purpose. The wines of the south of France are too new as yet for the English taste, which values wine, not for its ripeness or vinosity, but for its age, heat, and hardness. The stock of old French wine of the south has been so much in demand in Brazil, the north of Europe, and in England also, under the name of Port, that the supply of an advanced age is not adequate to the demand; there is no hoard of seven years' consumption existing, although the production is abundant.

Time and the cellar will cure this defect. The author has no more doubt of the result, than he has of there being another sunrise.

The author has shown that the stock of Portuguese wines was abundant, but the cost excessive, owing to artificial causes: and that they must descend to fair prices again, or be supplanted by other wines of vinous qualities more than equal to those that the British public have drunk heretofore as Port. The public are as likely to discover they pay too much for Port in presence of other wines of good quality, as their fathers were when they took Port and rejected French wines made fiscally expensive.

Such is the nature of what the author deemed worthy of consideration in his observations upon the wines of Portugal, and elsewhere, in this work. He trusts that he has now answered those who censured his previous remarks. He saw no necessity for making these facts more prominent in his first edition, intending to give the reader his own opinions, without the data on which they were formed: and, indeed, since that edition went to press, he has accumulated new facts. Those opinions were stated to be wrong, the Port wine trade to have always been a most advantageous one for the public, and the wine itself as beneficial for the stomachs of Englishmen as any that nature bestows. As far as nature is concerned, perhaps, this may be true: the author only condemns the interference of art in the business; and it is here "issue is joined," as the lawyers say. This preface has, he trusts, explained his remarks upon Oporto wines in his first edition, and proved that he might have said more on the subject than he chose to say at that time, or than he should now have said, had he not been told he was in error on the subject.

It would be difficult to show any advantage accruing to the author from stating facts unpalatable to individuals in the Oporto trade: no one can regret doing it more than he does. Fearlessness, however, in uttering the truth, when

the interest of a class may be affected, is not one of the prevailing sins of the present day, even in matters of more moment to the public. He will do little good who only tells half his story, and chooses to forget that his duties are not particular, but universal. However numerous those who act differently from the author, and of how much greater weight in point of example, he will not the less take credit to himself for differing from them in the right of acting wrong upon the present question. C. R.

London, *February* 2, 1836.

CONTENTS.

PAGE

INTRODUCTION iii

Preface to the Second Edition xxvii

CHAPTER I.

OF THE VINE.

Origin and Varieties of the Vine—the Grape—Wine district of Europe—Sites most congenial to Vine Culture—Antiquity of Culture—Methods of Training—Propagation—Regeneration—Various modes of Treatment—Annular Incision—Duration of Bearing—Favourite Species, and whence derived—Tears of the Vine 1

CHAPTER II.

OF THE VINTAGE.

Maturity of the Grape—Mode of Gathering—Pressing—Treatment in the Vat—Course of Fermentation—Subsequent Operations 25

CHAPTER III.

THE VINTAGE—(*continued.*)

Accidents to the Product of the Vintage in its subsequent state—Remedies—Treatment and Uses of the Murk—Oil of Grape Pips—Boiled Wines—Vins de Liqueur, de Paille, Jaune—Strengthening the Produce of Weak Vintages 43

CHAPTER IV.

WINES—FRANCE.

General Remarks—France the first Wine Country—Quantity of Land in Vineyards—Amount and Value of Produce—Heavy Duties to which Wine Growers are subjected—Wine Exported by Sea—Value of Exports—High Government Duties in Paris—French Wine Measures 55

CHAPTER V.

WINES OF FRANCE—(*continued*).

Wines of the Departments of the Marne, Haut Marne, Ardennes, and Aube, comprehending the ancient Province of Champagne—Wines of the Cote d'Or, l'Yonne, and Seine and Loire, composing ancient Burgundy—Wines

PAGE

of the Drôme, Rhône, and Vaucluse, formerly the Lyonnais, Dauphiny, Provence, Orange, and Languedoc—Of the Gironde or Bordelais—Of the Departments of the Dordogne, Vienne, Nièvre, Lot, Lot et Garonne, Moselle, Haut Rhin, Bas Rhin, &c. 71

CHAPTER VI.

WINES OF SPAIN, AND THE CANARIES.

General Remarks—Wines Exported—La Mancha, Val de Penas—Wines of Catalonia—of Valencia—of Arragon and Navarre—Andalusian Wines, Malaga, Xeres, &c.—Wines of Minorca, Majorca, and the Canaries..... 181

CHAPTER VII.

WINES OF GERMANY AND SWITZERLAND.

Antiquity of the Vine in Germany—The Rheingau—Species of Soil—Character of Vines—Large Tuns—Nature of the Wines, and Prices—Wines of Switzerland 201

CHAPTER VIII.

WINES OF PORTUGAL AND MADEIRA.

The Methuen Treaty—Quantity of Wine Imported in 1700 and 1800—Monopoly of Wine given to a Company—Conduct of the Company—Vineyards of the Douro—of Madeira and the Azores 215

CHAPTER IX.

THE WINES OF ITALY AND THE ISLANDS.

General Character of Italian Wines—Vine Culture—Causes of Neglect in their Manufacture—Variation—Sicilian and Elbese Wines..... 239

CHAPTER X.

WINES OF HUNGARY, AUSTRIA, STYRIA, AND CARYNTHIA.

Hungarian Wines—Calculated Produce—Practice at the Vintage—Different Kinds of Wine—Principal Vineyards—Austrian Wines—Carynthian and Sclavonian..... 253

CHAPTER XI.

THE WINES OF GREECE.

Greek Wines generally—Wines of the Islands—Cyprus Wine—Wine of the Commandery—Mode of Making, and Qualities—Wines of the Ionian Islands —of Albania, Romania, and of the Russian Dominions..... 261

CHAPTER XII.

WINES OF PERSIA AND THE EAST.

PAGE

Persian Legend relating to Jemsheed—Of the Grapes and Wines of Persia—The Wines of Mount Libanus and Judea—of Indian and Chinese Wines— 277

CHAPTER XIII.

WINES OF AFRICA AND AMERICA.

Few African Wines North of the Cape—Wines of the Cape of Good Hope—Importations from South Africa into Great Britain—Cultivation of the Vine in America..... 287

CHAPTER XIV.

ON KEEPING WINES.

Observations on the Contents of the preceding Chapters—on the Preservation, Cellaring, and Mellowing of Wines..... 299

CHAPTER XV.

ON THE ADULTERATION AND SOPHISTICATION OF WINES.

Prevalence of Adulteration—of Brandy and its Uses—Mixed Wines forbidden anciently—Increase of Spirit consumption—Various Modes of Sophisticating Wines—of Making or Adulterating Port and Claret—Observations..... 323

APPENDIX.

I. Summary of Distillation from the Grape..... 349
II. Wines of the First Class..... 357
French Wines of the Second Class..... 358
French Wines of the Third Class..... 359
Apparatus of Madame Gervaise..... 361
French Departmental Produce..... 362
Valuation of the same..... 364
French Exportations..... ib.
——— Spirit Returns..... 365
Consumption of Wines in France..... ib.
Importations of French Wines from 1700 to 1834..... 366
French and Portuguese Trade in the 17th Century..... 367
Duties per Tun on Wines in 1726..... 370
Drawbacks on Wine per Tun in 1726..... ib.
Duties on French and Portuguese Wines from 1786 to 1831 inclusive, per Imperial Gallon..... 371

PAGE

Table of Gironde Wines, and Prices 372
III. Spanish Wines of the Second and Third Classes 373
IV. Importations of Spanish Wines from 1700 to 1834 375
V. Importations of Canary Wines from 1785 to 1834 376
VI. German Wines of the Second and Third Classes ib.
VII. Importations of German Wines for the last 134 years 380
VIII. Portugal Wines of the Second and Third Classes 381
IX. Importations of Portugal Wines from 1700 to 1834 ib.
Total Export of Wines from Oporto from 1824 to 1833, inclusive ... 382
X. Wines of Madeira and the Azores 383
XI. Importations of Madeira Wines from 1785 to 1834 ib.
XII. Frozen Wine 384
XIII. New Rhine Wine and Champagne ib.
XIV. Methuen Treaty 385
Natural Effects of the Monopoly 386
Table of Portuguese Vintages 387
Modification of the Company's Charter 388
Decree presented by Jose da Silva Carvalho, declaring Lisbon and Oporto Free Ports 389
Decree of Don Pedro, abolishing the Oporto Company 390
Decree relating to Madeira Trade 391
XV. Italian and Sicilian Wines of the Second and Third Classes ib.
XVI. Miscellaneous Wine Importations 393
XVII. Hungarian, Austrian, and Sclavonian Wines of the Second and Third Classes 394
XVIII. Cape Wines imported from 1801 to 1834, inclusive 396
XIX. Total French, Spanish, and Portuguese Wines imported from 1700 to 1785 ib.
XX. Wine of all kinds imported into Great Britain for Home Consumption from 1785 to 1834, and Revenue 397
XXI. Wine of all kinds imported into Ireland from 1789 to 1828 398
XXII. Duties on Wines ib.
Table, showing the Fluctuations of Wine Duties at one view, both of the Customs and Excise, from 1786 to 1832 400
Consumption of Wine in England 401
——————— Scotland ib.
Bottles of Wine Consumed 402
XXIII. Wine Measures used by different Nations 402
XXIV. British Wine Measures adjusted with the Imperial Gallon 408
Standard Guage for Foreign Wines ib.
XXV. Old Wine Gallons, with their Equivalent in Imperial Gallons, from 1 to 100 409
XXVI. Instrument referred to, page 46 ib
XXVII. Regulations of the Customs 411
XXVIII. Alcoholic Strength of Wines and Liquors, after Mr. Brande, except those in *italics* ib.
XXIX. List of some of the various Liquors in use among Modern Nations besides Wine 413
Index of Wines 417



Different modes of training the Vine.

CHAPTER I.

OF THE VINE.

ORIGIN AND VARIETIES OF THE VINE—THE GRAPE—WINE DISTRICT OF EUROPE—SITES MOST CONGENIAL TO VINE CULTURE—ANTIQUITY OF CULTURE—METHODS OF TRAINING—PROPAGATION—REGENERATION—VARIOUS MODES OF TREATMENT—ANNULAR INCISION—DURATION OF BEARING—FAVOURITE SPECIES, AND WHENCE DERIVED—TEARS OF THE VINE.

THE varieties of the vine are numerous. Those which flourish in the open air or in the hothouses of England give no idea of the different species known in the countries most noted for its cultivation. A thousand distinctions have been reckoned in the vines of France, though the traces of difference must be very obscure, even to the eye of the experienced cultivator or naturalist. M. Dumont, who has attempted to classify the vines of the Jura, confirms this fact, although he remarks, that the task of classifying them generally throughout France, yet remains to be executed.

The most favored species of the vine at present, according to French treatises on the subject, obtain their denomination from the varieties in their produce, being the original plant altered in some cases but very slightly, by difference in the soil and mode of cultivation.

It would be a waste of time to enumerate the idle conjectures which are upon record respecting the original country of the vine. If it came from the East, of which there is little reason to doubt, the name of him who first cultivated it from the wild plant, is lost in the oblivion of past time, unless the mention of Noah in Holy Writ may be supposed to fix the name of the discoverer prior to the Dionysus of the Greeks or the Bala Rama of the Hindoos. Alexander the Great found the wild vine on the banks of the Hydaspes. The mountains of Ferdistan, in Persia, it is very probable supplied the vines which were first ameliorated by man; the wine of Shiraz is still made of vines grown on these hills. The wild creeper with its harsh fruit is general in the East. In America no less than seventy kinds of wild vine are known, though not more than one-half bear fruit. From Egypt, Palestine, or Asia Minor, into the Greek Islands, the transition of the vine was natural, as well as from the islands to the mainland of Greece, and thence along the shores of the Mediterranean to the Straits of Hercules. Vines were cultivated in France before the time of the Cæsars: first, it is believed, at Marseilles. They were found both there and in Narbonne when Julius Cæsar conquered Gaul. The grape which gives the rich wines of Frontignan, Lunel, and Rivesaltes, is traditionally asserted to have been imported into that country from the East, as late as the twelfth century, during the crusades, out of Palestine or the Island of Cyprus. The vine was introduced into Germany later; the first vineyards being on the Rhine in a cleared portion of the Black Forest.

A minute description of the vine in the language of the botanist would be out of place here. The general characteristics of the plant are familiar to every reader. The

fruit too, it is well known, differs in flavour and size; sometimes it is globular or oval in form; sometimes large and sweet in taste, while there are varieties almost as small as a pea, of a harsh crabbed disagreeable flavour. The grape also differs very much in colour, from a rich violet to a jet-black, or a white, green, or golden hue. The bloom upon the grape, which so delicately tints the skin, is considered in proportion to its prevalence a proof of attention or negligence in the culture. The colour is wholly in the skin; the pulp of every kind of grape, save one variety, having the same internal hue. When the vine blossoms it exhales a perceptible odour, of which the people of the East are very fond. This odour is thought to induce fecundity in the human species by the inhabitants of many countries in which the vine is cultivated. The general qualities of the plant are the same in all countries; they only vary in degree as the action of the sun in a genial climate matures more or less those virtues upon which the excellence of the juice depends. It need scarcely be remarked, that upon their perfection depends the goodness of the wine.

The vine is a hardy plant, and will grow so far north that it can do no more than blossom. In some parts of England, in propitious seasons, the grape will ripen very well; but the uncertainty of the climate prevents any attempt at cultivating the vine with a view to profit. There is abundant evidence that vineyards did once exist in England, and that wine was made here; but when land is as valuable as at present, a crop that would not repay the grower more than one year in seven, it would be madness to cultivate; but of this more presently.

The limits within which the vine may be successfully grown, so as to make a proper return, do not depend upon a ripening of the fruit now and then for the table. These limits are capricious, and connected with causes, if not wholly unknown, at least very unsatisfactorily explained. Half a degree north of Coblentz, or 51° north latitude, is nearly the exact limit in that direction, south of which wine

is made that will repay the grower from fruit reared in the open air. Moselle is made as far north as Coblentz, and though a wine of secondary quality it is by no means of so common and poor a class as some which is grown several degrees farther south. From Coblentz an oblique line of definition for the wine country in the west of Europe might be extended to Mouzon, in the department of Ardennes in France, in 49½° north latitude. Let such a line then be continued concave towards the north, through a portion of the department of the Seine and Oise to the town of Beauvais. From Beauvais to Pontoise, across the Seine to Evreux, and from the latter town through the departments of the Sarthe and Mayenne to the mouth of the Loire, excluding entirely the departments of the Pas des Calais, Calvados, Somme, Isle and Vilain, Côtes du Nord, Finisterre, Morbihan, and Nord. In this large extent of territory, except an isolated spot or two of no moment, in which a little miserable sour wine may be made in a favourable season, as an exception to the rule, there is no vine country. Yet some of the most celebrated wines in the world, both French and German, are made two or three degrees north of the mouth of the Loire, which is in latitude 47° 13′. Hock and champagne are made a good way to the north of that latitude. The vicinity of the western ocean cannot affect this singular boundary, for the coast from the Loire to the Pyrennees is an excellent wine country. The winds which sweep from the north over the sea between Great Britain and Norway, or perhaps, the winds which blow over the cold, marshy flats from the ungenial regions stretching north-east towards the Baltic, meeting no chain of hills to break their course, produce a chill which the vine is too delicate to withstand. The north-west wind sweeping along a vast extent of ocean, and across the British isles, is softened in rigour, and from that the country in question cannot be rendered unpropitious to the plant. The soil is rather favourable than otherwise to the cultivation of the vine in these districts, but it is a surface nearly flat, or of

very trifling altitude above the oceanic level in any part, and is more humid from this circumstance.

Doomsday Book proves wine was made in Essex, six acres producing a hundred and sixty gallons. There has been a change of some kind in the climate in different parts of Europe. Rabelais, who was born in 1483, makes an allusion in his works to wine of Britain—not Bretagne, but England. William of Malmesbury, in his book, "De Pontificibus," says that the vale of Gloucester used to produce, in the twelfth century, as good wine as many of the provinces of France: and it is well known that in the counties of Worcester, Hereford, Somerset, Cambridge, and Essex, there are lands which bear the name of vineyards, many of them having been attached to particular church establishments, whose ruins are yet in their vicinity. In regard to the vale of Gloucester, William of Malmesbury says, "there is no province in England which has so many and good vineyards, neither on account of their fertility nor the sweetness of the grape[1]." The tithes of the vines of Lincombe, near Bath, were confirmed to the abbey there in 1150 by Archbishop Theobold. In seeming opposition to this it is recorded in *Mémoires pour la Vie de Petrarch*, p. 337, *tome* i. in an extract from one of Petrarch's own letters to a friend, A.D. 1337, that "In England they drink nothing but beer and cyder. The drink of Flanders is hydromel; and as wine cannot be sent to those countries but at great expense, few persons can afford to drink it." Petrarch, however, must have spoken from hearsay alone. More recently, M. Arago of the French Institute has observed on the changes in the climate of France. He says, that at Mâcon, in the department of the Saone and Loire, ancient Burgundy, in 1553, wine was made of the Muscat grape,

[1] Near Tewkesbury, is a field still called the "Vineyard." A messuage and land in Twyning were held of the lord of Tewkesbury on certain conditions, one of which was the "finding a man for sixteen days in digging in the vineyard, and gathering the grapes for three days." *Inq. ad.* q. d. 39 Ed. III.—Fosbr. Glouc. ii. 293.

which it is not now possible to ripen there. The vineyards of Etampes and Beauvais were at one time celebrated; but, according to a report made in 1830, no wine can now be made in the whole department of the Somme, in which those places are situated. M. Arago also instances the same change of climate in England, as is proved by old chronicles. At one time vines were cultivated in the open fields throughout a large extent of the country, while now it requires care to bring grapes to maturity in the open air. M. Arago has inquired into the causes of this change, and thinks that a very marked change of climate has taken place both in France and England. "The cause," he says, "is certainly not connected with the sun, a proof of which is given in the steadiness of the temperature of Palestine."

The southern boundary of the wine country is in Asia, at Shiraz, in latitude 33°. The vine is grown in more southern latitudes, but no good wine is made south of that Persian city. Between Coblentz, or 51° north latitude, and Cyprus, 34° 30′, is comprised the vine district of Europe, an extent of sixteen degrees of surface, within which are found the choicest wines known. The principal countries are, France, Spain, Germany, Portugal, Italy, Sicily, Greece, Hungary, Styria, Carinthia, and Transylvania. There is also some wine made in Russia, the larger part in the Crimea. In 1831 no less than six hundred thousand vedros, or nine millions six hundred thousand bottles of a red wine called Kokour, were made in that province. In North America the vine is cultivated with some success. Near Washington there is grown a species of grape named Cataroba, unknown in Europe, and at Boston there is a good grape, which is called Isabelle. The Hock grape was introduced into Canada some years ago by German settlers, and also into the province of Ohio in the United States.

In the southern hemisphere, at the Cape of Good Hope, in Australia, and in South America, the vine is successfully cultivated.

A soil too elevated fails to mature the grape sufficiently for wine, as might be expected, from its being some degrees colder than the plain, and rendering the grape too harsh. A warm sun alone developes the saccharine principle in abundance, and prevents austerity in the wine. Thus in latitude 48° or 49° a slope of small elevation best suits the vine. Proceeding southward, though the slope may increase in height and steepness, it will be found equally eligible for ripening the grape. Owing to the increase of temperature in the south, the vines grown at a considerable elevation will be found to produce wine of a quality equal to that made from vines grown on a plain farther north, while the southern plain grows a wine of more body, strength, and generosity than the plain to the north, supposing the soil of both to be in every respect similar in quality.

With the difference of temperature northwards, the vine cultivated for making wine in open vineyards decreases in size. At the northern boundary of the vine country it is a stunted shrub, in the warm south it spreads from tree to tree, with a luxuriance of vegetation proportioned to the more genial influence of the climate. The vines of Tuscany, or of Grenada, and those of Coblentz, present a curious contrast both in appearance and fruit. On the one, nature bestows a prodigality of beneficent nurture, on the other she seems to abandon her stinted offspring to man.

The French, who understand the culture of the vine better than any other people, say, that the art of adapting each particular species of vine to the soil most congenial for its culture is yet in its infancy. Yet this, and the choice of the vine-shoots, embraces all upon which success in the quality of the wine depends. This, in the first wine country in the world, would be deemed inexcusable, were it not very well known that the interference of the government, and the discouraging system of extortion which it lately exercised, left the cultivator no means of trying experiments. Wine of ordinary character generally

pays the grower much better than the superior growths: he has consequently no motive to improve his wines, or to search for knowledge by tedious and expensive processes. Until 1789 he was not allowed to increase the extent of vine land, because it was supposed to prevent the growth of food for the labourer. It is the same in the east at this moment; the ignorance and rapacity of the ruler stinting the industry of the cultivator. The vine grower of Cyprus hides from his neighbour the amount of his vintage, and always buries part of his produce for concealment; the exactions of the government are so great, that his profit upon what he allows to be seen is too little to remunerate him for his loss of time and labour. When the taxes upon the industry and capital of a people are no more than are needful for good government, the aspect of nations will be wonderfully changed for the better. How much more will this be the case in those countries which are now taxed so high, that to improve the quality of their manufactures brings ruin upon the industrious!

Whether plains or hills are the best situations for the vine has been much debated. The majority of rich wines are certainly produced on the sides of hills, either abruptly or gently inclined. "Bacchus loves the hills," said Virgil seventeen hundred years ago. Though wines of the Gironde in France, so much esteemed, are produced on the plain, the suffrages in that country are decidedly in favour of the hills, which must be understood with the qualification that they are not hills of great elevation, or, in such cases, that only to the lower portion of them the allusion is made. Argillaceous hills are not those in which the vine most delights. Calcareous hills are the best sites for plants producing dry wines, especially when their summits are well wooded, the southern sides being open to the sun. It might be supposed from this circumstance, that in climates farthest north, where the vine is cultivated with success, the southern aspect would be indispensable. This, however, is not the case. The vine is productive on both

banks of the Rhine and Moselle. In some parts of France a western exposure is found to answer best. There are instances where even a gentle slope to the north has done well, as at Châtellerault; also in the department of the Indre and Loire, as well as on the banks of the Loire. A great deal of the best mountain wine of Rheims is produced from vineyards with a northern aspect, almost up to the northern boundary of the growth of wine in Europe. The vines receive the sun's rays obliquely, on very gentle northern slopes. Yet few would think it safe to plant a vineyard where it would not receive the direct rays of the sun. It would ill answer to take the exception for the rule in this respect. The south-eastern aspect in many instances produces good wine, though in Burgundy they complain that vineyards with this aspect are exposed too frequently to the latter frosts. On the whole, in the north the southern aspect is preferred, and in the south the eastern.

The most fatal scourges to the wine grower in the northern parts of Europe are frosts in April and May, after the preceding portion of the year has been sufficiently mild to allow the vines, which are very susceptible of atmospherical changes, to be advanced in budding. To obviate this they have recourse to artificial means, particularly on the Rhine, where an hour before sunrise they burn litter among the vines. Four persons are sufficient to smoke an arpent, or one acre one perch of vines, English measure, which they effect by torches of straw. They continue to operate until the sun shines on the plants. The melted frost falls off. It would seem, therefore, that the injury arose from the sun's action on the frost and not from the cold. The expense is about tenpence an arpent, exclusive of the labour. Another mode is practised in Germany. Paragelées[1], or frost-guards, are used, made of cords of straw, hemp, or

[1] Paragelées, *not* paragréles; the latter are hail-guards, or conductors, of which mention is presently made. The paragelée would be worth trial in British gardens.

the rind or bark of trees. With the cord they surround their fruit trees, letting the ends drop into a vessel of spring water. One vessel will do for all the trees of a large espalier. Cords must necessarily be joined together to surround a greater number of trees, and the two ends must be plunged into the vessel, placed four or five yards away from the trees in front. In Poland and Prussia this singular preservative is found to be effectual in sheltering fruit trees of all kinds from late frosts. Hail is another enemy to the vine grower. This is said to be completely obviated by the use of paragréles, which are now adopted on the continent wherever hail is likely to do mischief; their construction is well known. Cold spring rains are injurious to vine culture; as it may be supposed wet summers cannot fail to prove. Fog is highly prejudicial. Then come the diseases of the plant itself, which a want of knowledge as to causes renders obscure, in all but their fatal effects.

The vine has a disorder styled plethora; one from want of nourishment, a kind of paralysis; the canker; several diseases affecting the leaves; the fall of the fruit, and others, all necessary to be guarded against in culture. Besides these, wild boars, foxes, and even dogs, enter the vineyard to prey on the grape. Birds of many species are enemies of the grape, though some come on a friendly errand to devour the insects, of which there are many to be found about the plants, in fact, no less than fourteen well known varieties. These render the attention of the cultivator incessant; in fact, there is no rural occupation, at particular seasons of the year, more onerous. The insect called by the French *hanneton (Scarabæus vitis)*, in two species, attacks the vine leaf in the south, and does great mischief; snails; the *puceron* called *barbot* in Médoc, of a golden green color; also the *Cryptocephalus vitis*, called by the French, among other names, the writer *(ecrivain)*, because its track on the leaves resembles letters. It sometimes disappears for years together, and then returns and commits fatal ravages. The *Rhynchites bacchus* and *rubens*

lay eggs in the young leaves, and the larvæ prey upon them and the buds; but it would occupy too much room to designate each species, and the methods adopted for their destruction, which are too often but partially successful. At Xeres, vines are afflicted by a worm which finds its way into the heart of the vine stalk, and destroys whole vineyards. The remedy is to prune the vines, leaving a knot on each branch cut off, the insects entering the stock by the incision when it is made too close, as the Spaniards suppose, perhaps with reason.

The vine will grow in any soil which is not infected by stagnant waters; but it flourishes most in that which is dry, light, and stony or sandy. In the Arriege in France a rich wine, like Tokay, is obtained from mountain sides covered with large stones, as if the cultivators had left all to nature. Good rich soils never produce even tolerable wine, for the wine is not excellent in proportion to the size and luxuriance of the plant, but rather the contrary. It is best as the soil is lighter and drier. Porous soils, particularly those which are chalky, produce the best wines, fresh and light. Volcanic debris are congenial to the vine. In such soils it comes on slowly, but once rooted it flourishes well. In short, the soil which from dryness and lightness is scarcely fit for any other culture is best adapted for the vine, if calcareous or volcanic.

The soils which are granitic, or mingled with decomposed particles of that rock, grow good wines. In Italy and Sicily, the best vines grow among the rubbish of volcanoes. Any light, mixed, friable soil, in which water will not lodge, is congenial to this plant. Such a soil on a hill side is certain, with a genial sun and climate, to yield wine. On the quality of the soil, in every case, the nature of the wine depends.

Good vines do not grow well in close valleys where there are rivers, if they are planted near them, though in vales tolerably wide, where the sun can act with fervour, this is of small moment, as in the Gironde, where about a league

from the river are the finest vineyards. Some circumstances relative to differences in the vine are singular. In one little vineyard, that of Mont-Rachet, in Burgundy, hereafter mentioned, the soil is the same, the aspect alike, the vines receive the same care and culture, and the wine is made in the same manner, and yet three varieties of wine are produced: one, of the very first character, perfect, Mont-Rachet *Aîne;* another far less perfect, Mont-Rachet *Chevalier;* while the third, Mont-Rachet *Bâtard*, has rarely any of the qualities of the first-named wine at all! The cause seems inexplicable, unless one portion of the vines draw their nourishment from a stratum which the others do not reach, and thus a different quality attaches to the fruit from something which it obtains from its own peculiar sources.

In ancient times the Romans trained their high vines as they now do in Tuscany, along palisades or from tree to tree. This mode is followed in some parts of southern France. The vine is planted near a maple, a cherry-tree, or an elm, sometimes with a single stem, sometimes with two; the vine is suffered to interlace itself with the branches of the tree. The grapes are often shaded this way, by the leaves above them, from the heat of the sun, and do not reach maturity, so that the wine made from them is acid and cold. When two stocks are planted, they are suffered to grow up to the fork of the tree, and are then carried in festoons to the neighbouring branches. Columella says, the ancients planted six stocks to one tree; but not more than three are ever planted now. The trees were twenty feet asunder too in ancient times, as is gathered from another authority. It is found that by the present method the fruit ripens well. The land is cultivated below with leguminous vegetables: although no object can be more beautiful than a vineyard planted in this manner, the product of the vines is injured by the cultivation beneath, if too extensive. Most persons believe that this is the mode adopted in all vineyards; hence they are disappointed on

first seeing vineyards upon the continent, particularly those of the north.

It happens in too many instances that the trees which sustain the vines are irregularly planted; some are too near each other, and some too far off. In particular places a kind of ladder work has been substituted for the trees, about eight or nine feet in height, and placed about the same distance asunder; the vines are then led in festoons from one to the other. At Weissemburgh they are trained in bowers, or upon palisades. The different methods are denominated in France, that of the high stem training *(tige haut)*, in opposition to the low *(tige bas)*.

By far the greater part of the European vines, if not all north of Provence, are of the low training, and, indeed, this may be styled the general method in France, Germany, Switzerland, and Hungary. Trellis work of arches is adopted in Italy for most villa gardens. In the Campagna, and in Lombardy, poles and trellis work are both used. The vines on the hills are dressed in terraces, and wheat sown between. The vines of Greece, Cyprus, and Candia, are seldom above three feet high, but being very thick in the stalk, and grown like pollards, they are left to themselves for support. In the low mode of culture in various places there are methods equally various adopted for propping the plant. The simplest is the single prop, to which the vine about three feet high is affixed. Another method is to train its branches one over the other, like espalier fruit trees. The plants in some places are so low as to be left to themselves; or they are trained along little rods in circles, or on low trellises near the ground, and carried out horizontally. In Baden they are trained on pyramids of poles, in a complex manner. The result of experience is, that the high training by festoons is best adapted to certain situations in warm climates, and the low to those which are colder; while the vines grown on a sandy site may be left to run along the surface of the earth, though this cannot be done to advantage in soil of any other quality.

Though most vine proprietors have their favourite species of plant, yet many are not choice enough in this respect, and manufacture wine from a dozen different kinds of grape mingled together. The consequence is, that while some few species ripen their fruit at the period of the vintage, others in an unripe state find their way into the wine, and too often impart tartness. It would be unsafe to hazard a vintage on one species of vine alone; but five or six kinds selected with care would do away with this evil. It is from neglect of a similar kind that vineyards become deteriorated.

The grape which furnishes the most saccharine matter makes the best wine; no other quality will remedy a deficiency in sugar. The red fruit should be grown with the white, in the proportion of three red to one white; the red contains the colouring principle, the white grape is believed to impart the delicate taste.

Vineyards are made in autumn, by which mode a year is gained in the bearing, and not only is there that advantage, but many vines planted in spring fail entirely. In France the vine is propagated by layers of buds, which are taken up after the vintage, and by slips chosen from among the cuttings. They are planted in lines, where the ground will admit, and terrace fashion, one above another, where the declivity is considerable. An interval of four or five feet is left between each line of plants, which are so placed as not to face each other frontways. The vines from cuttings live longest, and bear most fruit; those from the layers shoot earliest. Crops of vegetables are obtained in some districts from the space between the rows the first year; yet most kinds of vegetables thus grown in vineyards, are thought to impart a disagreeable taste to the wine. Slips for propagating the vine, cut in winter from kindly stocks, are tied in bundles. They are immersed in a miry soil for seven or eight days, and planted in spring in a slanting direction.

The ground of a vineyard is dressed in different ways,

according to the custom of the cultivator, and the nature of the soil. If it be dry and sandy it is sometimes deeply raked. Many vine growers use the plough between the vine, and some substitute the hoe; pickaxes of various shapes are adopted in particular places; the spade, and even the pitchfork. On steep slopes the ground is turned over or raked in a diagonal direction. Weeds must be hoed up, and a hollow left round the roots of the vine in young plantations to retain the moisture; in fact, the earlier years of a vine plantation require great and incessant attention. Though the ground must be kept clear of weeds in light soils, the earth is not turned up to any depth from the surface. Over labouring at the soil is prejudicial, while every thing must be accommodated to the nature of the stratum below. In Spain, and in some parts of the Lyonnais, the ground is left in its natural state, when the roots are imbedded in a rocky superficies slightly covered with vegetable matter. Three or four times a-year in certain districts the ground is laboured, and in others many times more.

When vines are dressed it must be with great judgment in the choice of material. March is the best time for dressing vines, but litter should never be used for that purpose; ashes are considered good, and pigeons' dung best of all; the scouring of ditches or roads is excellent; but the nature of the soil of the vineyard should settle the compost to be used. Lupines are in some parts of France sown among vines, and buried when in flower round their roots, where they decay; a practice found to be of singular utility to the crops. A good dressing is obtained in various old earths from meadows or woods, of a different quality from those of the vineyard; a dressing of this kind will last ten years, and keep the vine in bearing. After all, the judgment of the cultivator must decide on the compost most suitable to the situation. Many obstinately use rich dressing in a considerable quantity, but it injures the fruit if not of a proper kind, and the wine made from vines so

treated is apt to turn ropy, and be ill-flavoured. The leaves in a year or two acquire a yellow tint, the stems decay, and the vineyard must be renewed. A moderate dressing only should be given. The decayed branches of the vine, the leaves of most vegetable substances, such as broom, briar, thorn, lucerne, and several kinds of grasses are observed to fertilize the vine: marine weeds must be used sparingly, so must animal manure, though that of birds is found to be beneficial. The Portuguese and French agree in their experience of the substances useful or detrimental for vine dressing.

Next to the soil and care of the cultivator the season is of importance. A cold wet season, as already stated, is injurious; the grapes produced being insipid. The prevalence of high winds is a source of mischief, and lastly, too high a temperature for long periods together. The favourable season is that which allows the vine to flower in calm, warm, dry weather, followed by soft showers just as the fruit begins to form, and when the heat desirable in the last stage for bringing it to full maturity is uniform, and uninterrupted by humidity.

Vines may be regenerated: in France this is done by what is called *provignage* and *couchage*. In the first mode the old vines are laid in the ground, and only two or three of the younger shoots are suffered to appear above the surface. This should be done in autumn in a warm climate, in a cold one, in February. After the layer takes it is cut from the old stock. The *couchage* differs in some respects from the former method, but has the same object: the vine is laid in the ground from December till March, but not till the buds appear. Old vines are frequently dug up and cleared, and again planted, by which they receive great benefit.

The vines are pruned three times before they bear fruit, when this operation is again repeated. In pruning there are rules to be observed, dictated by experience, which are too copious to detail. The pruning is directed more espe-

cially to the objects of the proprietor as to present or protracted profit. In hot climates pruning takes place just before the fall of the leaf, and that is considered the best period. In the Northern and middle districts of France, the first or second week in March is by most growers deemed an eligible time. The vine is frequently pruned with an instrument made on purpose, which accelerates the operation, and prevents the branches from being bruised. Besides pruning, the vines are deprived of a portion of their buds, to increase the size of the fruit; to do this well, is considered a work of judgment; and it is generally undertaken immediately after the flowers are put forth.

The vine, as already shown, is not always propped, though in the North of Europe this is generally the practice. The time chosen is after the first labouring of the ground in spring, before budding takes place, care being taken to avoid injuring the roots. The vines are tied to the props in a particular manner, with oziers if attached to a single prop; or if to espaliers or props placed palisade fashion, with straw bands. Whichever mode is adopted, it should be undertaken just as the vine has done flowering. There is also an operation styled clipping, which is performed by taking off certain shoots above the joints; the object of this is to increase the flavour of the fruit; it requires great care in the performance. In Cyprus the ground is hollowed in a cup-like form round the plant, to retain the moisture, and reflect the heat, for a certain degree of humidity is needful at the proper season.

In order to hasten the maturing of the grape, and increase its good qualities, recourse is frequently had, in some countries where wine is carefully made, to the annular incision. A tight band of iron wire has been adopted in Italy, and in Germany also, for the same end. The practice of incision is supposed to have been known to the ancients, to have been lost in the middle ages, and again resumed at the beginning of the eighteenth century. The

method in Italy is to loosen a band of the bark all round the branch, or stem, a little time before the plant flowers. The operation is performed only when a wet or cold season would prevent the setting of the fruit, six or eight days before the flowering, as damp seasons make harsh or insipid ascescent wine. Incision may take place on the old or young wood. The breadth is from a line to an inch. The vine leaves soon show a tint of advancing maturity. Nature generally clothes the naked part of the stem with a substance from between the bark and body above, which replaces the bark taken away. If this does not happen, the vine dies above where the incision was made, and fresh shoots yield fruit from below. Maturity is advanced from ten to fifteen days by the annular incision, according to the French cultivators of the Côte d'Or and l'Yonne. It is performed there with an instrument made for the purpose. In some countries, on young trees a hempen string, steeped in oil, is used.

The age to which the vine bears well is from sixty to seventy years, or more, and in the common course of things it is six or seven before it is in full bearing. In parts of the Gironde department in France, the vine does not bear well beyond forty years. In others, on a sandy soil, it will live and bear well to one hundred and fifty, or more. Bosc says, a vine in Burgundy had reached four hundred years, and in some Italian vineyards plants three centuries old still flourish and bear. The ancients gave the vine a longevity of six hundred years. The loss of time in bearing may be obviated by grafting on the stocks, or rather roots. There are two or three different modes of doing this. By that commonly adopted in the Bordelais, a whole vineyard may be grafted for three francs per cent. of the successful grafts, to the workman, and he will graft two hundred vines or more in a day. Vegetation proceeds slowly until July, when the shoots almost dart forth, and grapes are produced for the same year's vintage. The operation is simple but curious, and

in saving time to the grower is of the utmost importance, besides husbanding his capital.

There is yet another operation to which the vine must submit, in order to improve the quality of the fruit, and that is taking off the leaves. This is adopted only in humid seasons, or situations in the North. In the Calabrias, and south of Italy, they are obliged to have recourse to the opposite mode, and shade their vines with fern from the too-fervent heat of the solar rays.

It is not possible to make the reader comprehend the minute distinction between one variety of vine and another, by any description of the pen. In many countries there is, in general, one prevailing kind which remains the favourite, as in the South of Spain, where the variety called *Pedro Ximenes* is that from which a large proportion of the wines most valued in England is made, having been first brought to Malaga by a person of that name, two hundred and fifty years ago. An idea may be formed of the variety of Spanish vines, and the slight distinction there is between them, when Roxas Clemente describes one hundred and twenty species in Andalusia and Grenada alone. Besides the Pedro Ximenes, the *Uva; Mollar; Tempiana; Doradillo;* and *Moscatel;* may be noted as most in use. Crescenzio, when he wrote his "Opus ruralium commodorum," reckoned forty species of vine in Italy in the thirteenth century. In France, the kinds most noted are the early black *morillon*, of two varieties, the *madeleine* and the vine of Ischia, the first originally from Italy. The vine of Ischia produces fine fruit as high North as lat. 48°. It is supposed to have reached Italy from Chio. Then there is the *meûnier*, the earliest bearing species known. The black *bourguignon*, or *franc pineau;* the *pineau blanc, noir, doré, vert;* the *teinturier* or *gros gamet* and the little *gamet;* the pearl grape; the violet *cornichon;* the white *griset;* the white *morillon; pique poule gris;* the white *mornain;* the *muscat;* the *chasselas*, originally from Cyprus; the *cioutat;* the

grape of Corinth; the Aleppo grape; the *vionnier*, grown at Condrieu, from whence the hermitage vines were originally taken; the *gouais*, which has several other names; the *verjus; macabeo;* the violet Corinth; and numerous others. Hervey's catalogue of the Luxemburgh collection, published in 1812, reckons of the black oval sorts, thirty-seven; black round, ninety-eight; white oval, forty-four; white round, seventy-three; grey or violet oval, five; grey or violet round, ten; in all, two hundred and twenty-three sorts. The Botanic Garden of Montpelier has five hundred and sixty varieties. Columella reckons fifty-eight varieties anciently, in his book *de Re Rustica;* Herrera, fifteen essential species in Spain; Duhamel, fourteen species, with distinct marks adapted to the French soil; while in respect to minute differences in species, no less than nineteen were counted by Dumont, in one vineyard at Arbois.

In the Gironde seven varieties are grown for white wine alone. The *pineau*, and its varieties, afford the wines of Burgundy and Champagne. There are eighteen varieties of this plant alone. Hermitage is now produced from the Scyras, or Shiraz grape, supposed to have been originally Persian, the grape of Shiraz being the finest in the world. The Côte Rotie comes from the *serine.*

In Madeira there are many varieties of the vine; and it is there planted in rows. At the Cape of Good Hope it is planted in the same way, and there are several varieties of the plant. At Madeira, the *verdelho* seems to recall the French *verdot.* They have also a species called *tinto*, from the Spanish *tintilla.* The grape of Candia was planted there from the East. A French grape from near Orleans produces, on the Rhine, the best German wines. But it is useless to occupy further room with this topic; the foregoing sketch will suffice, generally, for a subject on which a vast deal might be written.

It is clear that the species of vine chosen should be adapted to the peculiar nature of the soil, country, and

climate, in which it is planted. Too often this affinity is overlooked; the custom of the province or country, or the caprice of the proprietor overruling the more rational and scientific method of adaptation. Very celebrated wines are produced in vineyards where the species of plant is by no means held in the first repute. There appear to be anomalies in the vine, and the making of wine, which require more acute observers to explain than have yet written upon the cultivation of the plant, and the process of maturing its produce.

It is impossible to determine what particular circumstances cause those alterations in the nature of the vine, which occasion its varieties. There is an obvious difference in the produce of vines grown upon particular soils, but they do not alter sensibly the character of the plant. The vines grown upon calcareous or chalky soils, are not exclusively designated any more than such as flourish upon those which are volcanic, and therefore they cannot be thus classified. Change of climate may alter the nature of the fruit, but the ground favourable to the plant generally is favourable to each variety; as gravelly, rocky, or sandy spots, whether in the North or South. It is allowed by the French that there is a great deal of knowledge yet to be acquired respecting the vine, its adaptation to particular situations, and certain mysteries in its bearing. They do not pretend to know much upon the subject; and if they are not among the initiated, it is in vain to look farther for information, since nearly all we know of the vine and its generous produce, that is worth knowing, is the fruit of their experience and communication.

There is no part of the vine which is not used for some useful purpose. In Switzerland the leaves are applied to medicinal or surgical uses. In cuts and green wounds they are esteemed a sovereign remedy. Decoctions of the juice of the leaves are used in poultices with great advantage. The leaves afford an agreeable tea, requiring

more sugar than that of China; it is observed greatly to strengthen the nerves. The prunings well bruised and pressed, yield excellent vinegar. The leaves and tendrils bruised, and the juice fermented, give a pleasant light drink of a vinous character. On this head the late Dr. Mc. Culloch has treated fully in his work on British wines. The leaves are also excellent food for cows, sheep, and hogs, when other food is scarce; but they are of so much more importance in the vineyard, that they are rarely spared for the purpose. In such cases they must not be taken till they begin to fall off. They are then gathered, put in a dry place, and sometimes salted, pressed, and left to ferment. In some places they are stratified with straw, and then afford still more excellent fodder. Animals are sometimes turned into the vineyards after the vintage, to browse upon the leaves.

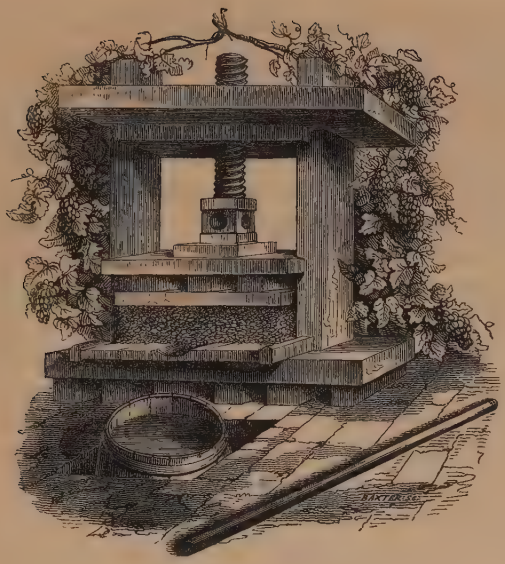
What are called the "tears of the vine," are a limpid distillation of the sap at the time the plant begins budding. The same liquid will make its appearance on the slightest wound of the plant. The latter is injurious, but the former is a necessary emanation. The "tears of the vine" are thought in some places to be possessed of valuable properties in keeping off disorders. This liquid is collected in a bottle. The end of a shoot is cut off; it is bent into a circle without breaking, and inserted in the neck: in a few days the bottle is found filled. Vine branches furnish potash and salts when burned; basket-work is fabricated from them; and the bark is used for bands to tie the vines to the props.

A plant so useful, it need be matter of no surprise, has its superstitious applications. Not only do the leaves decorate the hair of the village girls, in some of the Southern vine countries, but the mode of plucking them, under certain spells, is thought to discover to the vintage lasses the truth or falsehood of their lovers.

This chapter might be extended to a volume in length; but as the cultivation of the grape for wine is of no mo-

ment in England, the general outline of the plan pursued is sufficient.

It is not commonly known that the tendrils of the vine may be made to produce fruit. By cutting off branches near the place from which the tendrils spring, in a short time small nobs make their appearance: these become grapes, equal in excellence to any on the tree. This discovery was made by a gentleman of Strasburgh, and, if report say true, has been frequently tried by other persons since, and found to succeed.



The smaller Wine Press.

CHAPTER II.

OF THE VINTAGE.

MATURITY OF THE GRAPE—MODE OF GATHERING—PRESSING—TREATMENT IN THE VAT—COURSE OF FERMENTATION—SUBSEQUENT OPERATIONS.

THE vintage is the next important operation connected with the vine after the cares of the dresser are over. Not only do the opinions of individuals in wine countries differ very widely upon the management of the vintage, but in some the period of the gathering is regulated by authority. In France this barbarous custom still continues in many districts, the prefets of departments, or sous-prefets, and even the mayors of the communes, who may, or may not, know any thing about the matter, issue the order for the vintage to commence, as if the vine grower were not the best judge of the state of his own produce, and did not know when his property was in the best order

for yielding him a profitable return. The consequence of this relic of feudal outrage upon property and free will is, that the vintage being seldom fixed in a proper manner, the fruit after all cannot be collected at once; for while in one place it is matured, in another it is far short of the necessary degree of ripeness. The proper moment for gathering the grape is agreed to be when the pellicle is thin and transparent, not breaking easily between the teeth; when the colour is deep; if the grape be white when it takes a grey tint; if red when it puts on a dark colour, or if violet a deep black. The stems of the clusters, when they have become in substance like wood, losing their green hue, and resembling the main branches of the vine in texture, are another sign; and, finally, when from the pendant cluster the grape gives way readily, the fruit, particularly in the South, shrivelling up from the sun's action, if required for the sweet and luscious wines. These signs are observed in the South of Europe about the end of September, or commencement of October. In the North the fear of autumnal frosts, which injure the unripe grape, makes the seizure of the exact moment proper for the vintage a matter of great importance.

The time of the vintage being fixed, the gathering is begun as early in the day as possible after the sun has dissipated the dew. The red grape is generally ripe before the white. In the North they are not so particular respecting the dryness of the fruit when gathered as in the South; in fact, it is often gathered in the north of France with the dew upon it. The gathering is uniformly continued with as much rapidity as possible, if the weather continue fair, so as to terminate the pressing in one day. If this cannot be done the vintage is suspended; for the fermentation in a warm, or even a moderate temperature, is far more energetic than in cold damp weather. It ruins the durability of the wine if the fruit is gathered and fermented at such a time. In Spain the

vintage lasts for several weeks, so as to ensure maturity to all the grapes, beginning in September, and ending sometimes not until the close of October. The fermentation takes place only in the casks, vats not being employed in an operation so prolonged.

The clusters in some countries are cut off the plant with a knife. In France the scissors is used, by which the stems of the bunches are rapidly severed. In ruder countries the hand only is applied, a mode injurious to the grape as well as to the vine. The most approved plan is to make three separate gatherings of the fruit. The first includes all the finest and ripest bunches. The green or rotten grapes, or such as have been eaten into by insects, are cleared from the clusters, which are then carefully carried home. The second gathering implies naturally a second pressing. The grapes are not quite as ripe as for the first. The last gathering and pressing consists of the inferior grapes. The gathered bunches are deposited as lightly as possible, to prevent the grapes from being bruised. All dry or spoiled grapes are cast aside, where proper care is used, or fine and delicate wine is to be made. Each labourer places his gathering in an ozier basket, or in a sort of wooden dosser, borne by another labourer with the least possible motion. In France, in the department of the Marne, the fruit is carried on horseback, and covered with cloths. The grapes in the better vine districts are plucked from the bunches; in the others placed entire in the press, stems and all. The best grapes only are used for making the best kind of wine. The astringent principle lodged in the stems is thought to be beneficial, and to impart to the wine a capacity of endurance. When the grapes are picked off it is only for red wine, and is generally performed by the hand. White wine grapes are rarely picked from the clusters. In Spain all the grapes, even for the best sherries, are flung into the press together. Nothing but their being arrived at perfect maturity is regarded. Spoiled, insect-eaten, rotten grapes, are all pressed with the good.

Where a vine grower has land producing different qualities of fruit, he mingles his produce according to the wine he desires to make. Light, or stony soils, yield a bright wine, of a fine bouquet. The fruit from a different soil, by blending the grapes together, may produce a wine more desirable for other qualities, observing that growths of the first quality must alone be intermingled. No improvement can ever take place by mingling good wine with that of inferior quality. Perfect wine can only be made by superior combinations. Delicacy, colour, aroma, bouquet, transparency, are only to be retained by a strict adherence to this rule. A cloudy wine, of little merit, is the result of a good mingled with an inferior growth.

In making white wine, it is desirable that the grapes should be bruised or shaken as little as possible on the way to the press; for when the contrary happens, the colour will infallibly be disengaged from the skin, and the wine will be what is called "partridge eye," and not white. Red wines are bruised or trodden previous to pressing, to disengage the colour from the skin, which is so much avoided in making the white wines. After treading they are thrown into the vat, the colour disengages itself, and then the press is applied to the murk.

Grapes were anciently trodden out after being exposed on a level floor to the action of the solar rays for ten days, and were then placed in the shade for five days more, in order to mature the saccharine matter. This practice is still followed in certain cases in one or two of the islands of the Greek Archipelago; at St. Lucar in Spain, in Italy, at least in Calabria, and in a few of the north-eastern departments of France. The fermentation is facilitated greatly by this process. In some parts of France a labourer with sabots treads the grapes out as they come from the vine-yard in a square box, having holes in the bottom, placed over a vat, a very barbarous method. The murk is then removed, and he proceeds with fresh grapes, until the vat

beneath is full. Sometimes they are squeezed in troughs, by naked men getting into the vats, using both sabots and hands at once. In other places the press is first used, under which the bunches of grapes are placed, and the must is pressed out; but it is found that by this mode the grapes oppose a resistance so strong, as to render the operation tedious. A better mode than treading has been adopted, not unfrequently, in France. Two wooden cylinders, turning in opposite directions, are employed to crush the fruit. There is a still more complete invention of a machine by M. Acher, of Chartres, which does not permit a single grape to escape its action.

The wine-press differs in construction in different countries. There are several kinds. It has already been observed, that for red wine the grapes are trodden before they are pressed, to disengage the colouring matter from the skins; and that in making white wine this operation is never performed. In either case, when the press is applied, the first pressing is dispatched as quickly as possible. Of presses there are commonly the small and the large. The first is a simple screw-press, furnished with blocks of wood, to replace the void when the murk has been pressed nearly to its utmost. This common press is easily understood. Instead, however, of placing the bar which turns the screw in a hole in the screw itself, it is frequently omitted altogether. A wheel, of a diameter as large as the space between the cheeks of the press will allow, is substituted, the circumference of which is grooved to receive a rope, that it may act in the way a rope acts upon a drum in mining machinery. One end of this rope is attached to a capstan, with a wheel of large diameter, forming the circumference of half a dozen spokes, which are the levers. The rope from the press being wound round the main tree of the capstan, is turned by men at the extremity of the radii, and consequently exerts an immense power upon the murk. Others have a wheel fixed to the screw, by the spokes of which

they are worked. Presses are generally of oak, about eight feet square. Some have two screws. Most of the presses used in wine countries might be greatly improved in the workmanship. In Spain they are very rude, many being mere levers; while in certain districts portable ones are employed, carried from vineyard to vineyard.

The plank which rests on the lower part of the press on which the grapes are placed, is called the *maye* in France. It is furrowed, and slopes a little for the wine to run forwards, where one channel conveys it into a vat sunk in the ground. When the press is heaped as high as is thought necessary, three pieces, or rather beams of wood, are placed upon the grapes parallel with the side of the press—one in the middle, and one at each extremity of the heap, on which rest thick planks, their ends towards the cheeks. Upon these again rest transverse beams, and over them the beam attached to the screw comes down.

At first the press is used gently, that the wine may not overflow. The pressure is then gradually increased, until the murk is moderately acted upon. This is the first pressing. The grapes that did not sustain pressure being scattered over the edges of the heap, are now gathered up, the press relaxed, and being placed upon the murk, the press is tightened again. The wine from this is called of the second pressing. The edges of the whole mass are now squared down with a cutting instrument, so that the mass of fruit is reduced to the form of an immense oblong cake, upon which the cuttings of the edges are heaped, and the press worked again, which makes wine of the third pressing, or, as the wine maker calls it, "wine of the first cutting." The pressing and cutting are repeated two or three times, and what liquid flows is called among the labourers wine of the second or third cutting. Last of all, the murk is frequently steeped to make *piquette* or small wine for the labourers. At Ay, in Champagne, the press is used with great power, and the murk is as hard as a board.

The wine of the first pressing is always kept apart from the rest, especially when the season is hot, and the fruit ripe. It would be apt to take a red colour if mixed with wine of the second pressing, when it is designed to make white wine. There are seasons however, when it is useful to mingle the first and second pressings. The third, in France, must never be mixed with the two first. In Spain, the *agua pies* or last pressing is often mingled with the first, although a jar or two of water has been flung upon the murk between the pressings.

The larger class of wine-press consists of a screw, acting upon the extremity of two immense levers. It is capable of making no less than twenty-five pieces of wine in four hours. Where vineyards are extensive, as it is desirable to press the produce of the gathering in one day, however large in quantity, this press is useful; but it is the instrument for making a large quantity of secondary wine, rather than a little of a choice character, and is used principally by the larger wine growers. There is one species of wine made without beating, treading, or pressing; this is what they call in Spain "*lagrima*." The grapes melting with ripeness, are suspended in bunches, and the wine is the produce of the droppings. This can only be effected with the *muscatel* grape of the warm South. In this way the richest Malaga is made. In Cyprus the grapes are beaten with mallets on an inclined plane of marble, with a reservoir either at the side or at one end.

The vats are always cleaned and put in order by the time the vintage commences, in those countries where due regard is had to the character of the wine. The fermentation, carried on in barrels in Spain, in France and Germany is effected in vats more or less capacious. Some wash their vats with particular substances. Vats made of stone are washed with layers of quick-lime, to saturate the malic acid existing in the must. Many wash the vats with warm water if they are made of wood; or with brandy, decoctions of aromatic plants, salt water,

boiling must, and similar liquids. The practice of using quick-lime for this purpose is very liable to injure the wine.

The quicker the vinous fermentation is effected the better is the wine. To this end each vat is filled on the same day, wherever the process is well understood; but they are not quite filled up, lest the must should ferment over. Vats of a very large size are not often employed in cold climates, where the seasons are hazardous, because they take too long a time to fill. In warm climates, the larger the vat the more active is the fermentation.

Fermentation is the mysterious change of certain vegetable matters, when separated from the vital stem, and about to form new combinations. It is rendered active by warmth, while it is retarded by cold. The great principle is the saccharine, without which it would be in vain to expect perfect fermentation. Yet the saccharine principle will remain inactive, unless it be combined with other vegetable matter in due quantity to effect the result desired. A relative proportion of sugar must combine with the substances thus necessary. An attempt has been made to ascertain, by an instrument, when fermentation is perfect, but its success is doubtful, and of the precise time experience alone still remains the judge.

The temperature of twelve degrees of Reaumur, or fifty-nine of Fahrenheit, is most conducive to the success of this process; and therefore, when the weather retards the fermentation, it is customary in the North to add hot must, to hasten its progress: this must is not allowed to remain on the fire longer than to obtain the highest degree of heat possible without actual ebullition. If the season has been cold, sugar in a small quantity is sometimes added to the must, if the saccharine matter be deficient; shoots of peach or almond trees, or a handful or two of dry elder flowers, are also added. The must is stirred and agitated, and then covered up. In many places the mode of management is different from this, but not materially so. In warm

weather, when fermentation proceeds naturally with sufficient rapidity, no artificial methods are taken to expedite it, as in the South of Europe. Even in the North, when the season is propitious, the fermentation is best left to nature.

Vinous fermentation begins in a few hours, or may be retarded several days, especially if there be no communication between the must and the atmospheric air: for though wine will ferment when excluded from atmospheric communication, it then ferments exceedingly slow. Some erroneously contend that the wine thus treated is better, and keeps its bouquet in higher perfection.

Sugar, vegetable extract, tartarous and malic acid, and water, are essential ingredients in the composition of wine; and as they vary in quantity in the fruit, different results are produced on the must undergoing fermentation. The vegetable extract, or leaven, is a principle plentiful in wheat, and bears the character of albumen, in which azote is also ascertained to be present. If on fermentation a good proportion of tartar does not appear, a dry wine will not be the product; for in the rich luscious wines there is the smaller quantity of tartar, the great richness of the grape occasioning the saccharine matter to be in excess. This difference in the fruit is caused by the climate and sun, and the excessive ripeness of the grape, even to the shrivelling of the skin in some cases. Thus the rich sweet grape of the climate of Malaga, in which sugar abounds, as may be expected, produces a wine very different from Burgundy, where the tartaric and saccharine principles are perhaps nearly on an equality. In the Malaga wine the sugar is not all decomposed in fermentation; in Burgundy it is wholly so. The saccharine matter is in dry wines wholly changed by fermentation into spirit, or alcohol, from simple vinous fermentation. This is most probably not the case with the luscious southern wines, or they would be much more spirituous than they are. Distillation, however, shows the quantity of alcohol that may be obtained from them to be much greater than from the wines of the

North. In France the wines of the Côte d'Or, or Burgundy, give only one-eighth of their weight in the brandy of Commerce on distillation; those of the Gironde, or Bordelais, a fifth; while a generous wine of the Drôme, yields a third part of spirit.

The second fermentation in the cask is a miniature repetition of that in the vat. A precipitation again takes place, and the wine is afterwards racked. A third, called the insensible fermentation, continues for a long period after the wine appears as perfect as art can mature it. Time, which mellows the harshness of the wine, blends more intimately the component parts, while all extraneous matter and the tartar are thrown down, adhering to the sides of the cask. It seldom happens that the wines of the South become acid, because the saccharine principle is more powerful from the action of the warmer sun, than in those of the North,—but this will be noticed further on.

Fermentation in the vat is at first what is called "tumultuous;" the carbonic gas ascends in bubbles to the surface with a hissing noise, and a scum is formed on the surface, consisting of the lighter portions of the impurities of the wine. Heat is evolved; the temperature of the wine increases to ninety or a hundred degrees. At length the vinous odour is perceived, and the fermentation ceasing, all is quiet as at first.

Those wines which effervesce *(vins mousseux)* are impregnated deeply with carbonic acid gas, from their being drawn off before fermentation is complete. This gas disengages itself from all kinds of wine during the process of fermentation, and when it ceases to do so the wine is limpid, and the taste purely vinous. The first period of fermentation is one of great disturbance in the must, over the surface of which is collected what the French call the *chapeau*, the head, or crust, which swells upward as the fermentation proceeds, the gas escaping through the pores, or cracks which form in it. When it is observed to sink down, the time is arrived to close the vat. Space enough

must still be left for the carbonic gas to free itself. The time necessary to complete the fermentation differs according to the quality or ripeness of the grapes, the species of plant, the soil, and the temperature of the vineyard. In some places in France, as in Burgundy, the must remains in the vat from six to thirty hours only. Near Lyons it is left six or eight days, or even as many as from twelve to twenty. In the south-east from twenty-five to forty. At Narbonne it is frequently kept for seventy days, and the fermentation being over, the wine clarifies in the vat, in contact with the stalks, which add strength to it. It appears that the head, daily acquiring greater consistency, at length completely excludes the atmospheric air, and the wine is deemed secure. This usage it must be unsafe to depend upon; there is great hazard to the wine in the practice. In Portugal about seventy or eighty hours may be the average of fermentation; in Spain from four to five days, varying according to the temperature. In Germany the stalks are rarely suffered to remain during fermentation; in Portugal always, and in Spain too this is generally the practice.

Though experience has shown in France that exposed fermentation is the best, an individual at Montpellier, named Gérvais, claimed the invention, (Appendix, No. II.) and asserted the superiority of a close method, by an apparatus which is said to have been borrowed from others, but was nevertheless secured by patent. The error in this machine is said to be the retention of the carbonic acid gas, which ought to be allowed to escape freely, or the fermentation will not be complete, for the want of considering that the quicker the fermentation, the alcohol and perfume will evaporate in a less quantity, because they are superseded by the more vehement evaporation of the gas, which, in that case, occupies the space above the head exclusively, and will not suffer either the alcohol or perfume to rise and mingle with it. The usual method preserves the bouquet fully as well. The slower the carbonic

gas escapes the more likely the spirit and perfume are to pass along with it. In fact the suffrages of the best practical judges are against this invention, as not imparting any thing new to the wines in quality or perfume, covering the vat being found fully equal to every object, leaving sufficient space for the escape of the gas. Some persons, in order to hasten the process of fermentation in the North, plunge red hot iron bars into the wine, and with considerable advantage to the process.

The vats and barrels require great attention; if they are new, the wood of which they are composed is apt to impart a bad and bitter taste to the wine. This is guarded against by repeated washings in cold, and afterwards in hot water, in which peach leaves are steeped, or by a washing of salt water, or rather soaking, to extract all which is disagreeable in the wood, and finally they are washed with boiling must, bunged, shaken, and left to cool. Old casks are washed in hot must, after the tartar has been scraped from them. In case of their exhibiting symptoms of decay they are burned, for sooner or later the effects are sure to be perceived in the wine. Sulphur match is burned in those barrels which afford the least suspicion of their imparting a bad taste, and they are set in a dry place, being bunged up before the match has expired. Before burning the sulphur the barrels must be carefully dried, for damp or water left in them will make the wine taste of sulphur. No pains are spared to guard against mischief to the wine from this cause. Oak is the wood preferred for casks; but in some parts of the Continent beech is employed, because there is an opinion that beech-wood imparts an agreeable flavour to the wine, and brings it earlier to perfection. Casks, or barrels, have different names in different provinces, or countries, without immediate reference to difference of measure. Thus, in the department of Marne, a cask is called *queue;* which in the Cher is denominated *tonneau;* in Indre et Loire, *poinçon;* in La Vendee and La Nievre, *pipe;* at Lyons, *botte;* at

Bourdeaux, *barrique*. When casks are of a large size they are named *muid;* and when of the largest that are made, *foudre*. The casks of Portugal are most commonly denominated pipes, so are those of Madeira. In Spain, at Barcelona and in Valentia, they are the pipe; at Xeres, the *botta* or butt.

Earthen vessels, glazed, are among the most ancient receptacles for wine, which casks have superseded. If they are the least porous they cannot fail to be prejudicial. The ancients remedied this defect by waxing, pitching, or liming them; but the wine must have been liable to injury from these materials, and the carriage of earthen vases must have rendered them expensive from breakage. At Pesth in Hungary, marble vessels are employed to hold wine. In Cyprus, as hereafter stated, conical earthen vessels are used in fermenting the wine, sometimes pitched, or anointed when they come from the furnace with a boiling mixture of turpentine and pitch, mixed with vine branch ashes, goats' hair, and very fine sand, which never falls off. These vessels contain from twelve to twenty barrels, and must not be confounded with the jar by which Cyprus wines are usually sold. Notwithstanding these last, a large proportion of Cyprus wine is transported in skins. Limed vessels, and those of marble, are liable to be acted upon by wine to its great detriment.

Before taking leave of this part of the subject, it may not be amiss to mention the colour, in relation to the time of acquiring vinosity. If the quantity of must in the vat be considerable, and the weather warm, the wine should remain a short time, for the fermentation is quickly perfected. If the saccharine principle abound, the must be thick, and the temperature low, the fermentation will be slower. The want of perfection in fermenting in the vat, may be helped considerably after barrelling; but wine suffered to become acid, injured by access of carbonic gas, or touched with mouldiness, cannot be properly recovered. In regard to colour, some of the most perfect wines in that

respect, as well as in delicacy of taste, remain only six hours in the vat. Time, in fermentation, does not add to the depth of colour, the bruising of the skins alone imparts it.

The precise time for drawing off wine from the vat, after the fermentation is perfect, can be attained only by experience. The moment the head sinks, visible fermentation has ceased in the rising of gas bubbles, but the sensible heat being over, it is not always proper to draw off the liquid. Sometimes the proper period is not less than twenty hours after the wine drawn into a glass seems fine enough, and in all respects ready to draw. When the wine is drawn off, the murk remaining in the vat is again subjected to pressure. It is sometimes the case that this last wine is mixed with what is first drawn off from the vat, to its great deterioration.

The wine being barrelled, is removed into the first cellar. The best cellars should be slightly humid, and as deep under ground as the nature of the soil will permit them to be, even to fifty feet. If too damp it affects the wine, if too dry the staves of the barrels shrink, and waste the liquor. Light should be admitted by very small apertures, having slides or shutters to close according to the state of the temperature, for which end a thermometer or two are indispensable to hang against the walls. The arch over should be solid, and as thick as possible, in order to prevent any motion above communicating its tremour to the barrels. The whole should be covered as well in winter as summer with litter, to prevent the action of both cold and heat. The floor should be of earth, well beaten, and the recesses, if any, and the entire floor, should be strewed with sand. If found too humid, the number of air holes should be augmented; and if too dry, a part of them should be stopped, and those left be narrowed. If by any chance the rays of the sun penetrate by the air holes, a wall must be built before them, or sloping planks, covered with turf, be fixed above them. The casks should be set

upon stands, six or seven inches high, made of square strong timbers. Wedges should be placed under, to keep them steady. No cask should be suffered to touch its neighbour, or the cellar wall, but should stand perfectly insulated, and at the same time immoveable from any slight cause. The casks should be parallel with a horizontal line through their centres lengthwise, so that all sediment may lodge in the bellying part of the barrel which is lowest. No fruit, flowers, garden produce, or green wood, should ever be placed in a wine cellar, as they impart, too frequently, a bad taste to the wine, which is wonderfully susceptible of all that impregnates the atmosphere around, and often contracts acidity from extraneous substances lodged near.

The wine cellared from the vintage requires new cares to render it fit for the market. The casks, in consequence of the disengagement of the carbonic gas still remaining, are not quite filled up, to allow space for the secondary fermentation. About two inches from the bung is left vacant. A hole is made near the bung, and stopped with a wooden pin, to let out the gas from time to time as it fills up the space above the wine, but care must be taken that no external air enter. When it is found that no more gas escapes, the barrels are filled, and hermetically closed. This last filling in France is known by the term *ouiller*, to ullage, and in some places this operation is performed every day for the first month, every fourth for the second, and every eighth until the wine is racked. In this way the celebrated Hermitage wines are treated. At Bourdeaux it is performed every eighth day. The wine used for filling should be of a quality equal to that in the cask. The cellars must be visited daily, and the wine frequently tasted to judge of its state.

When casks are neglected to be filled up, a white mouldiness, styled "the flower" by the French, covers the surface of the wine, which soon renders it unfit for drinking. To remedy this the atmospheric air is forced out, after

which lighted sulphur is introduced, and the barrel is struck to make all the air bubbles rise to the surface, and force the mouldiness towards the bung; the cask is then gradually filled, and the mouldiness collected at the bung hole, until it all comes away.

It is said that there is a sympathy between the wine in the cellar and the vine. The former is observed to work in a remarkable manner when the vine puts forth its buds. The fermentation at this period is often obliged to be resisted by artificial methods, by sulphate of lime, camphor, sulphuric acid, and even the application of ice.

The next operation is the racking, to separate the wine from the lees. In Cyprus the wine is kept on the lees to the last. In France racking is indispensable; such is the difference arising from climate and soil. In some countries the wine is racked in the first December after the vintage, in others once a year in February, or March. The first year, in some places, wines are twice racked, in spring and autumn; in others in May and December, if possible, during a frost. The necessity for racking more than once a year depends upon the nature of the wine. Some wines, of a generous quality, will remain on the lees three or four years, but in general they should be racked before the first vernal equinox. There are some who, instead of racking, by troubling the wine, and remixing it with the lees, establish a second time a species of fermentation, which is intended to ameliorate its quality; but this must be executed with great care, to avoid ascescency, and the wine must be racked the instant it approaches fermentation, and be placed in a colder situation than that it previously occupied, having fined it before the racking, if it appear at all troubled. This should be done in dry fine weather.

In racking wine, the cask should be bored about three fingers' breadth above the projecting part of the staves with an instrument made on purpose, and the cock intro-

duced, so as not to waste more than a few drops of the wine, and exclude in the operation the smallest portion of external air. The bung is slightly lifted, to permit air enough to enter and set the wine running. At Beaune, in the Côte d'Or, the wines of which rank so high in estimation, they are racked by means of a brass tap, having a straight stem. To this stem is fixed another tube, the end of which is inserted in a wooden pipe, of a slightly conical form, which is introduced into the empty cask. The cask is placed on the side; a small hole or two are bored with a gimblet in the uppermost stave, which, when the cask is full, are stopped up, and the cask set in its place. The wine is thus racked without the least disturbance.

In some parts of France, as at Condrieu, on the Rhone, the wine is racked two or three times, twenty or thirty hours only passing between each operation. If the wine is displaced for any reason, while in the growers' hands, it is generally racked each time. At Xeres the sherries are racked in general but once, although there may be here and there a particular exception to the rule.

Wines which do not become limpid by racking, are submitted to the further process of fining, as afterwards described in this work, and then racked. Many kinds of wine require, from the extreme fineness of the particles of the lees held in suspension, to be put through this process before they are fit for the market. The wine during the operation is always strongly agitated with a cleft stick. It is observed that the inferior wines lose their harshness by this process, and that the best growths acquire greater delicacy.

A word or two may here be added respecting the employment of sulphur matches, which sometimes imparts a slight taste to wines when ill done. Its object is to impart to wine clearness and the principle of preservation, and to prevent fermentation. A little cotton cloth is rolled up, until it is an inch or an inch and half in diameter,

and six or seven inches long. This is dipped in melted sulphur, to which, rather fancifully, certain aromatic perfumes, extracted from sweet-smelling flowers, are sometimes added. The match is lighted, and suspended in the cask by means of an iron wire, the bung is then closed. This process injures the colour of some of the red wines, and the substitution of a little brandy flung into the cask, and set on fire by an inflamed string, or cord, while the hand is kept over the bung-hole, is found to answer the same purpose, without injuring the wine.

In the south of France a quantity of wine is made, called *muet*, for which the grapes are trodden and pressed at the vintage, and the wine is fined immediately, to prevent fermentation. This wine, or rather must, is next poured into a barrel, until it is only a fourth part filled; above the surface of the liquid several sulphur matches are then burned, and the bung closed upon the fumes. The cask is now violently shaken until the sulphurous gas is absorbed, so that none escapes on opening the bung. More must is then added, and fresh sulphur, and the cask treated as before. This is repeated several times, until the cask is full. This must never ferments; it has a sweetish flavour, and a strong smell of sulphur. A quantity of proof spirit is now added, and a wine highly spirituous is the product. It is sometimes called Calabrian wine. It is generally employed to give strength, sweetness, and durability to wines which lack these qualities.



CHAPTER III.

THE VINTAGE—*(Continued.)*

ACCIDENTS TO THE PRODUCT OF THE VINTAGE IN ITS SUBSEQUENT STATE —REMEDIES—TREATMENT AND USES OF THE MURK—OIL OF GRAPE PIPS—BOILED WINES—VINS DE LIQUEUR, DE PAILLE, JAUNE—STRENGTHENING THE PRODUCE OF WEAK VINTAGES.

Wines are subject, from known or unknown causes, to deterioration, or malady, soon after they are made. The two most dangerous changes to which they are liable in the maker's hands, are the becoming oily, or contracting acidity. Oiliness is a milky appearance, put on by wines made in a wet season, and ill fermented. The wine loses its natural fluidity, and becomes, what is called in England, ropy. White wines are most subject to this malady, but not in the wood, unless of meagre quality; but they will sometimes turn oily in the bottle, however well corked. After a certain time has expired they will again frequently become pure. The white substance at first seen in the wine turns brown, shrinks, and detaches itself in scales.

The wine then takes its usual clear colour, and is cured. It is not prudent, however, to leave the cure to chance. Cream of tartar is often applied as a remedy in France. To each barrel holding seventy-eight gallons, about four quarts of wine are allowed, heated to the boiling point, with from six to twelve ounces of the purest cream of tartar, and the like quantity of sugar, thrown in, and well mixed up. This is put into the barrel hot, the bung made close, and the cask shaken for five or six minutes. In case there is reason to think the bung will fly, a little hole is made near it with a gimlet, to be stopped with a peg as quickly as possible, so that only the smallest quantity of the carbonic acid gas thus generated can escape, for it is to the generation of this gas that the wine is indebted for its cure. Two days afterwards the wine is fined in the ordinary manner, but with the bung closed. The cask is then shaken, and returned to its place. After the expiration of five days more it is racked. Wine in bottles so damaged is uncorked, emptied into a barrel, and treated in the same manner. Some remedy the malady by passing the wine over new lees, then fining, and sulphuring it; others, by placing the bottles in a higher temperature, and in the fresh air; and some fine it with whites of eggs and fish glue beaten together. But these methods will not restore the wine to the state it attains when naturally cured. In Spain, from the slovenly fermentation, and mixture of bad grapes with good, ropiness is very common. It is cured by mixing brandy with the wine, principally sherry, which also makes it more agreeable to the English palate; and if used early, is considered to prevent the mischief altogether. Picking over the grapes would be a more rational and wholesome preventive, but the Spaniard is the slave of custom, and perhaps too idle to be at the trouble.

All wines are liable to turn acid, those which are weak more especially, if ullage be allowed. The casks must always be kept filled up to the bung. Wines are observed to be most liable to this disorder about the time of the

vines being in flower. They never recover from this state without aid, but get worse and worse, until good for nothing. By taking the malady at the moment of its appearance, the evil may be arrested. The wine must be drawn into a cask, well sulphured, and placed in a situation colder than that in which it previously stood. Honey, or liquorice, is often dissolved in the wine, or cream, or the wine is saturated with acetate of magnesia. Many use gelatine of bones: but the best mode is to pass it over the lees at the vintage, when it will lose its acidity. In the spring succeeding, however, it is almost certain to revert to an acid state again. Thus far, provided the wine is taken at the first appearance of change, if it be at all advanced, the malady is hopeless, and the wine will infallibly become vinegar.

Sometimes the acidity of wine is only superficial, and when that is the case an instrument is adopted in France, which passing deep into the contents of the cask, fills it without the least disturbance, until the bad portion overflows at the bung-hole, being displaced by that which is introduced below in a sound state.

Bitterness is another malady to which the best quality of wine is subject. It follows the insensible fermentation either in the wood or bottle, and does not show itself until the wine is old. Some of the best Burgundy is subject to bitterness, especially if it tasted rough on attaining maturity. The wine is generally clear during the time it is thus affected. If it happen in the cask, it must be passed over new lees, or wine of a younger growth of the same vineyard, but this only renders the wine liable to new changes, and injures the bouquet. It should be afterwards fined with eggs, suffered to rest two or three months, and then be racked. If the wine is in bottle, it will often re-establish itself in two or three years, but it must not be moved. The wine will lose some of its colour and bouquet, but become finer, and good for drinking. If moved it must be decanted, which some persons do on first

discovering the malady, and repeat it as often as there is any deposit. Almost all wines change colour with age, and generally in proportion to their original deepness of hue. When this is the effect of malady, they lose their transparency; the red become black, and the white a livid yellow; the taste, also, gets worse. This is a new fermentation, and is stopped with purified tartar, reduced to a fine powder, and put into the cask, which is shaken, with the bung open, that the gas may escape freely. The wine must be then drawn off into a well sulphured barrel, placed in a cool cellar, racked, and fined. If not thus restored, such wines are mingled with those of a newer vintage, from the same vines, but not of a vintage too young. Sometimes wines thus disordered in the bottle will recover themselves, though this must rarely be depended upon.

Wine which is pricked, or has a flat dead taste, shows that the external air has been admitted either by the cork, if in bottle, or from the bung being ill fitted, if in the cask. In such a state the bouquet is lost, and in the next stage of deterioration it exhibits the white filaments already mentioned from another cause, denominated "the flower." This mischief is remedied if the wine be not too far gone, and possess strength and body, by racking it into a cask just emptied of sound wine, and sulphured. It is then closed very carefully for fifteen days, fined, racked, and bottled. If the wine were too far gone for this mode of recovery, a third part of sound wine is added, in place of a third subtracted, which should be younger and fuller of spirit. A better mode is to add to a cask containing two hundred and forty bottles, thirty or forty quarts of fresh lees, obtained from racking newer wines; these should be well mingled with the spoiled wine once a day, for three or four days. It is then to be racked and bottled. If near the vintage time, the wine is passed over the murk, and this is found an excellent remedy. Preparations of lead have been used for the purpose of recovering wine thus injured. Those who use them act disgracefully: such

wines are highly deleterious, however small the quantity of lead which may have been infused. It is an excellent thing to throw cold well water over the casks, and apply ice below them, when there is reason to apprehend that wine is turning; thus early allaying the elements of mischief.

A taste of mouldiness is a fatal accident in wine, and may arise from many causes; such as a bad or foul cask, a poor egg employed in fining, or decayed grapes in the vat. M. Chaptal gives an account of a nauseous odour, which disappeared after a long fermentation, found to proceed from a vast number of wood-bugs which had been gathered with the grapes and crushed in the press. Drawing off the wine into a well sulphured cask is a good practice, adding some bruised peach kernels, or almond wood, by which means, if the injury be slight, it is remedied. Bone charcoal is good for the same end, or burnt bread crust, suspended in the wine. If, however, the taste be very strong and fixed, it cannot be recovered; it is in this case unfit even for distillation or vinegar.

New wine is sometimes frozen. To recover it, racking into sulphured casks is had recourse to, with the addition of brandy. After this it may be fined and bottled. The aqueous part of the wine is that which congeals. This has sometimes furnished wine growers with the hint which they have taken to their advantage, namely, to expose their wine to a frost, that it may congeal a proportion of the watery part, and then rack off the residue, which is found to be improved both in body and spirit. (See Appendix, No. XII.)

Some wines deposit in growing old a matter totally different from the lees. One kind is found adhering in a lining to the bottom of the bottle or vessel; another species is suspended in the liquor, being too light for deposition. Some have imagined these to consist of preparations of lead used by the maker of the wine. When this

deposit is burned upon charcoal, it gives out a vapour which smells like burned tartar; if continued on the burning coal, a white residue, which is pure potash, will be obtained. Preparations of lead are easily detected in wine by throwing sulphate of potash, or liver of sulphur, into it, when a black precipitate will be formed.

Tartar precipitates itself in the form of small crystals in all good wine. In wines which are oily it takes the appearance of sandy mud, as well as in those not duly fermented. Tartar communicates no bad taste, nor does it alter the clearness, except in the slightest possible degree; on the other hand, it assists in the preservation, and makes the wine less subject to change or malady. Its appearance in the bottle should never cause it to be decanted, if designed to be drunk on the spot. If the wine is to be moved it is absolutely necessary to put it into fresh bottles, or it will remain a good while cloudy, if not be ruined by contracting a bad taste. In decanting it into new bottles great care is requisite, and the operation must not be hurried. In France an instrument has been adapted to decant wine without disturbance, even to the last drop, which is described in the appendix.

Red wines give out much more deposition than white. Those which are of such a light nature that they appear in the wine the moment the bottle is touched ever so slightly, cannot be decanted, with every precaution, perfectly clear. Of this class are the wines that sparkle, or the *mousseux*.

One cause of a bad taste in wine arises from the gallic acid in the new oak used for the barrel becoming more or less disengaged; it is apt to render the wine rough and hard. Oak staves for casks are steeped for some days in a strong lye of wood ashes; this prevents the wine from contracting astringency when they are put together. The taste is very difficult to remove, and often impossible. The casks are washed with lime quenched, and then with water, until it comes away clear. Wines affected by the

oak of the cask, are said in France to have a flavour of the wood. A slight musty taste is sometimes contracted from the wood of the barrel, which is corrected by agitating mustard seed, juniper, or sage, on the wine. These are supposed to act by their essential oil, and thus restore it. Another taste is that of musk, contracted also from the barrel; it is got quit of by ventilation.

It has already been observed, under the head of "culture of the vine," that it is one of the most useful plants known, for every portion of it may be applied to some purpose. The must of the south is employed in making a rich confection with citron and aromatic sweets. The richer pears, apples, prunes, melons, mushrooms, and roots of various kinds, are mashed and mingled with must boiled down to a syrup, till they are incorporated by methods which it would be foreign to present objects to particularize.

The murk after being taken from the vat is still rich in must, and is accordingly again submitted to pressure, the product is nearly equal in quality to that first taken; this has been noticed already. On the residue of the grapes the refuse of the vintage, together with the murk, hot water and syrup are thrown, and the product is a very small wine, cooling and pleasant to the palate, flavoured with peaches, elder for colour, and a little Florence iris. This is commonly called *piquette*, and is often given to harvest people and cultivators in the south, during the last burning days of the summer, or rather autumn. To prevent it from turning acid, honey is sometimes added, and cream of tartar, which aids the fermentation and the spirituous product. White grapes are deemed better than red for this purpose.

One hundred and ninety-five parts of murk burned, furnish five and a quarter of potash. The murk beaten in water and distilled produces brandy of a secondary quality. Vinegar is also extracted from the murk acidified. Verdigris is made from the murk by placing plates of copper and murk alternately in a vessel, to the

diameter of which the plates fit. The whole is wetted from time to time with acid wine. When the oxidation is complete, the verdigris is taken out, and put into packages for sale. The murk is eagerly sought after by all the herbivorous animals for nourishment. It is given dry or mingled with other fodder. Fowls are remarkably fond of it. In some places it is eaten fresh from the vat by cows and mules, but it intoxicates and injures them given in that state. Further, the murk is one of the best dressings for the vineyard of any known, especially if mingled with doves' or pigeons' dung. After the vintage, it is a custom among the more judicious wine growers, to place large quantities of murk in the dove or pigeon house; the pips being eagerly sought after by the birds. From thence the murk is taken, impregnated with pigeons' dung, to pits near the hogsties, which they drain, and which are lined with the dung of the hog: on this the murk rests, and on its surface is heaped the dung of every kind of fowl which can be collected. This is considered the best dressing for the vine of any known. It is placed round the stumps over the roots in the month of February, when the weather is fine. The first rains carry the salts from the dressing down to the roots, and the effect of the operation is sure to appear in due time.

The murk is often dried from the press, and burned where fuel is scarce, being laid up for winter use, exactly like tan in some parts of England. In a state of fermentation it is found to be useful as a bath for rheumatic limbs by exciting perspiration. It is said to be a specific for the rickets used in this way. Fractured limbs, placed in a vessel of murk hot from fermentation, for a longer or shorter time as may be necessary, are said to be consolidated more rapidly than by any other means.

Even the pips or seeds of the grape are applicable to useful purposes, besides feeding pigeons. Separated from the murk by washing, and carefully dried, they are ground in an oil mill; the produce is very superior to that from

nuts, either for eating or burning. No bad odour accompanies the use, and it burns as bright as olive oil, without smoke. This employment of the pips of the grape is an Italian invention of about a century old. The product is in Italy about nine per cent. of oil, too little is made to allow of exportation.

It is not needful to go into minute particulars upon the foregoing applications, because England is not the country of the vine; they are enumerated to render the subject more complete, and to afford an idea of the exceeding value of the vine where the climate is congenial to its maturity. It will not be out of place here to mention that there are different kinds of "domestic" wines, as the French designate them. What are called domestic wines in France are those which are rarely exported from the neighbourhood, where they are made generally for home consumption. Strangers are very little acquainted with these. Such wines are a preparation of the grape exceedingly rich. By the term is not to be understood boiled wine, such as is used for sherbet, nor that made to mingle with sherry, as at St. Lucar, in Spain, first undergoing fermentation; but only concentrated must, boiled, with a mixture of brandy, and sometimes of aromatic seeds; in fact, rich syrups.

Boiled wines, *vins cuits (vino cotto, Italian)*, themselves are of ancient date, having, it is supposed, passed from Asia into Greece. They are common in Italy, Spain, and France. The ripest and finest grapes are selected, generally of the Muscadine species, gathered during the hottest part of the day, in order that they may be free from dew, and humidity of every other kind. They are carefully moved, laid upon hurdles, and exposed for five or six successive days to the sun's most ardent rays, turning them at least three or four times every day. They are then trodden out, as is the usage with the common grape at the vintage. The must is placed over a clear fire, with as little smoke as possible. The wine must be boiled until

it is reduced to one-third of its original quantity. It is then skimmed and poured into wooden vessels, carefully cleaned and quite new, to remain until cool, after which it is barrelled up close. This wine is very pleasant to the taste, of a deep amber colour, delicate and generous. Corsica is famous for such wines, which are treated so judiciously by boiling, that in the north of Europe they are taken for Malmsey or Canary. When very old they are often passed off for Cyprus, Tinto, or Malaga, of the best kind, as the owner may wish them to appear. Boiling is also adopted to make new wine have the appearance of old. For this purpose, it is raised in temperature close to the boiling point, barrelled and bunged up directly, and in three months it is found possessed of the character of wine kept from six to ten years. Bourdeaux wine two years old will thus acquire the flavour of that which is ten or a dozen in age. Port wine is often thus treated in England by placing the bottles in tepid water, and raising it to the boiling point, when, after being but a short time in the cellar, it will deposit a crust, and put on the character and virtue of wine which has been cellared for years.

What are called in France *vins de liqueur*, are those in which the saccharine principle has not entirely disappeared, and been changed into alcohol, during the process of fermentation. Wines of this sort abound, both red and white. Of these are the sweet wine of Cyprus, the white of Rivesaltes, Syracuse, Malvasia, Malaga, and similar kinds. Unfortunately, the wines sold under this name are not always genuine; the practice of adulteration, by which the more valuable qualities of this species of wine are deteriorated, is but too common, and it is less liable to detection than in dry wines.

The wines called *vins de paille* are so denominated from the grapes being laid for several months upon straw before they are taken to the press. Sometimes, instead of being laid upon the straw, they are hung up in straw tresses. If the wine intended to be made is what is called *demi paille*,

the grapes are thus exposed for fifty or sixty days only; if for *vin paille* wholly, they remain for three or four months in the foregoing state. In the department of la Meurthe in France, *vin paille* is called *vin de grenier*.

The Hermitage *vin de paille* is not fermented for some months after it is made, so that in reckoning its age, the first year from the vintage is never taken into account. It is sometimes in a state of fermentation for six years, and not until this fermentation has ceased for two or three years is the wine fit for consumption.

What is called *vin mousseux*, which is best described by what is understood in England of champagne, is divided into *grand mousseux* and *crêmans*, or *demi mousseux*. The product of the second pressure of the grape in the department of the Maine is called *vin de taille*. The *mousseux* wines of Arbois are called *vins blancs de garde*, and when old, *vin jaune*.

There is no pure wine in France like that which is designated claret in England. This wine is a mixture of Bourdeaux with Benicarlo, or with some full wine of France. *Clairet* wines in France signify those which are red or rose coloured. Thus rose coloured *mousseux* wine is called *clairet* or *rosé;* there is no such original term as claret in France for wine; it is an English corruption of *clairet*.

It is the practice of wine growers to mix several sorts of wine together; but this is not done by the grower so frequently for the purpose of adulteration, as to give body or strength to the product of a weak vintage. No honourable wine grower will sell wine which has been thus treated without mentioning the circumstance to the buyer, supposing he has been obliged to amend his light wines with those which are stronger, and of a more generous quality. There are mixtures of this kind which may even be beneficial. In the Bordelais they mingle wines on the lees to correct the roughness of their growth. Hermitage, the black wine of Cahors, or of the best vineyards of the Gard or Herault departments, are thus applied. A perfect

fermentation ensues, and the wines thus embodied are excellent Medoc. Adulterations of wine, of which more anon, are the work of the dealer rather than of the grower, and rank with those imitations extracted from all sorts of substances, for which some individuals are said to be celebrated in the trade.



CHAPTER IV.

WINES—FRANCE.

GENERAL REMARKS—FRANCE THE FIRST WINE COUNTRY—QUANTITY OF LAND IN VINEYARDS—AMOUNT AND VALUE OF PRODUCE—HEAVY DUTIES TO WHICH WINE GROWERS ARE SUBJECTED—WINE EXPORTS BY SEA—VALUE OF EXPORTS—HIGH GOVERNMENT DUTIES IN PARIS—FRENCH WINE MEASURES.

FRANCE is the vineyard of the earth. Her fertile soil, gentle acclivities, clear sunny skies, and fine summer temperature, place her, in conjunction with her experience and the advantages of science applied to vinification, the foremost in the art of making the juice which so gladdens the human heart. She is able to manufacture within her own limits, every description of wine, from the harsh product of her Northern provinces, to the luscious malmsey of the South. From her delicious Champagne and Burgundy, which have no equals, to her rich Lunel and Frontignac, with all the grades of class and quality besides. Though custom may have made the wine growers in many districts retain absurd habits, detrimental to the perfection

of their produce, and though pecuniary means are frequently wanting to enable wine growers to improve as they might do the quality of their wine,—though heavy and absurd taxation has made it far more profitable to manufacture wine in the largest quantity, and at the cheapest rate, than to grow the best, there are proprietors enough of vineyards with adequate capital, men of integrity, industry, and ingenuity, who keep up the excellence of their wines, and employ every attainable method for improving their growths, so as to hold fast the high eminence which France has acquired over all the world for the vinous productions of her soil. The number of the proprietors of vineyards in France is very great. The highest year of produce from 1829 to 1833, gave 40,038,702 of hectolitres, and the lowest 15,281,395.

The wines of France, against those of all the earth, may be fairly said;—their effect on the health is grateful and beneficial. They do not, like the wines of Portugal, (which, indeed, is not the fault of the growths, but of greedy traders) by being too strongly impregnated with brandy, carry disease into the stomach at the moment of social joy. They cheer and exhilarate, while they fascinate all but coarse and vulgar palates, with their delicate and delicious flavour. Their variety is great, and they stand upon their own intrinsic merits.

There are two or three departments of France alone which are not friendly to the vine. With these exceptions, the country may be called one vast vine garden. The exceptions are six only. In eighty of the departments wine is made, although of varying quality. The number of hectares[1] in cultivation in the year 1823, was 1,736,056, or about 4,270,000 acres. The annual mean product, 35,075,689 hectolitres, or 920,721,088 gallons, at about $6\frac{2}{3}d.$ per gallon, valued at 540,389,298 francs, or 22,516,220*l.* 15*s.* sterling; not, indeed, the prodigious

[1] The hectare is 2 acres $1\frac{7}{8}$ rood English.

sum which it has been made by some calculators, but still an enormous amount for a country which grows corn besides for thirty millions of souls. In 1806 the vines were estimated to cover a surface of 1,674,489 hectares, or 4,142,600 English acres nearly. The minister of commerce in 1828, stated that he thought the produce 600,000,000 francs in value, or about 24,000,000*l.* sterling, at $6\frac{1}{2}d.$ per gallon English. The calculations made in 1806, and for several years subsequently, were not correct,—while the valuation and produce were exaggerated. This has been proved during the increased progress of the *cadastre*, by which means more accurate results have been obtained.

For every hectare cultivated throughout France, a mean produce of 22 hectolitres 6 litres was given for the years between 1804 and 1808. The subsequent calculations, which are more correct, give an average of 20 hectolitres 27 litres each hectare, or 514 gallons imperial measure to every $2\frac{47861}{100000}$ acres English.

A portion of the produce of the vines, amounting to 5,229,880 hectolitres, or 115,057,360 gallons, is distilled into brandy, and produces 751,945 hectolitres of spirit, of different degrees of strength, besides 70,015 distilled from the murk, yielding 37,288 of alcohol; the produce in pure alcohol being 469,817 hectolitres. The total value of wine and brandy exported from France into foreign countries in 1823 was 76,639,026 francs, or 3,193,292*l.* 15*s.* sterling. Thus, besides growing corn and vegetables upon a system by no means complete or economical, besides all her sterile and forest lands, and in great part of the middle and south a defective husbandry compared to that of England, France annually exports above three millions sterling of her agricultural produce in wine only—a proof of the great fertility of her climate; and when her population is taken into account, a thing by no means discreditable to her industry. Over and above the foregoing quantity of grape brandy, 93,457 hectolitres are distilled from corn and other substances, besides the vine; and between eleven and

twelve millions of hectolitres of beer, perry, and cider are made. From these latter, as well as corn and potatoes, brandy is distilled, carrying the total amount of brandy of all kinds to 915,417 hectolitres, or to 553,086 hectolitres 27 litres of pure alcohol. In gallons this is about 24,029,696; nearly 9,000,000 of which are exported. In France, the consumption, therefore, for all purposes is a little above 15,000,000 of gallons, with a population of thirty-one millions; in England it is nearly 28,000,000 of gallons, with a population of twenty-four millions. The value of the wines has nearly doubled since 1788. They were then valued at 14,853,877*l.* 9*s.* 2*d.* in 1788, but in 1823 they had reached as already seen 22,516,220*l.* 15*s.* sterling.

Some of the wines of France will keep good for a very long term of years. Rousillon has been drunk a century old, and still found in high perfection. Many other kinds are found at fifty and sixty years old to remain good, particularly such as are grown on the Rhine, in the Eastern Pyrenees, *ci-devant* Rousillon, which boasts wines beginning to be drank in England under their proper denominations, in Cahors, in the Gard, and the Var. The wines of Champagne, Burgundy, and Medoc, are comparatively short-lived, being more delicate, and having less body.

While the cultivation of the vine in France is exceedingly varied, the treatment of the fruit at the vintage is more or less agreeable to science, in proportion as the wine made is in demand beyond the limits of local consumption. In one part of France the wine vats are oval, and during fermentation the carbonic gas is only suffered to escape through a bung-hole, with the view of preventing too much of the spirit from evaporating. A cover is luted on in some places, and a small orifice only left open. In others a coverlid alone is placed over the vat. Fine cloth is found to answer very well in a district or two where it has been adopted, the spirit being retained while the gas escapes. Thus there is no general uniformity in an essential part of the process of wine-making throughout France. Districts

vary from each other in practice, and science has not yet universally overcome usage.

In cultivation it is precisely the same; and the beautiful vineyards of France, which so charmingly clothe the sides of hills, otherwise barren from not suiting a different purpose in agriculture, with fertility and verdure,—even the rockiest and shallowest lands, from the Moselle to the Mediterranean, from the Rhine to the Atlantic,—display in this way either the skill or the old prejudices of the people. As a whole, what a picture does this rich country present, flowing with corn, silk, wine, oil, and honey! Corn, vines, mulberries and olives, dividing from north to south the soil which a genial sun warms, and an agricultural population look upon with unfailing joyousness.

In other countries, to nature is left almost the sole management of the production of such wines as obtain a celebrity beyond the territory in which they grow. In Spain nature has done every thing, and man has generally deteriorated her gifts. One of the finest red wines in the world is the Val de Peñas, yet it is rarely to be drank beyond Manzanares without the defilement of pitch, from the goat-skins in which it is carried. In France the slightest foreign taste, scarcely perceptible to the stranger, would not be suffered in the better classes of wine. The national honour cannot be more scrupulously watched, than the purity and perfect quality of the fruit of the vintage is regarded by the better class of vine growers. The consequence is that no wines in the world are their equals.

It is impossible, notwithstanding the self-willed notions of wine connoisseurs, that any thing approximating to the truth can be known respecting the wines in repute, no longer back than the middle ages. The aroma, the perfume, the exquisite delicacy which distinguish the modern wines of France, were, it is very reasonable to believe, unknown two or three centuries ago. We find that the wines of districts which were once celebrated are now very indifferent, or the palates of our forefathers must have been

much less refined than our own. That the wines in France once praised highly, and now deemed of third-rate quality, may not in reality be much altered by time, is very probable. When the ladies of nobles made their breakfast in England upon salt junk and strong beer as luxuries, it is very likely that the taste of the wine-drinker on the continent, a few miles to the south, was after a pattern equally coarse, and that in reality it is modern refinement, rather than the deterioration of the wine, which induces a belief, that either the climate, soil, or wine, in particular parts of France, is greatly fallen off. That a vineyard may deteriorate from neglect or want of care, or through bad planting, there is no doubt, where the taste, as in our time, is so nicely adjusted; but our forefathers were hard men, and the strength, rather than the flavour of wine, was their criterion of its excellence. The church, among the richer disciples of which gormandizing and good drinking were once a part of orthodoxy, was the patron of the vine in the time of her flourishing authority and almost sovereign power. Among the sensual of the cloister, rather than the court, was found the better order of wine tasters and wine cultivators. The best growths of a district were always on monastical lands, and to this day they retain their sites. Where the plants have been carefully kept up, they furnish wines not at all deteriorated, it is probable, but rather the reverse, from the earlier times of their history. The progress of luxury, and the gratification of the lusts of the flesh, is generally in proportion to the leisure of the people among which they appear. The idleness of the holy fathers enabled them to bring to the utmost perfection a fruit, and its products, so essential to satisfy their pre-disposition for the good things of this life. Every abbey had its vineyard: and if, subsequently, the wine produced be not as good as it was within human memory, it may be attributed rather to less assiduous cultivation, than to change of soil, or to any natural alteration. There is a ridiculous tendency in some writers, not only those who write about the vine, but

upon other subjects, to praise that which, from lapse of time, they can judge nothing at all about, and to ascribe to all but causes reconcileable to reason, changes which, if not imaginary in themselves, are very easily accounted for upon simple principles. There are spots in France, the wines of which it was once the fashion to praise highly, which are now deemed very inferior in rank. Fashion and taste are for ever changing, and these alone might contribute to account for what are easily to be traced up to their causes by an exertion of common sagacity.

In France, wine has been subjected to heavy duties, altogether amounting to more than twenty per cent. These taxes are vexatious; a portion of them is paid only in the towns and cities. Together they amount to the sum of 4,000,000*l.* sterling. They are excessive, and are very unequally levied. The "octroi," or duty, on entering Paris, is twenty-one francs, or seventeen and sixpence the hectolitre, which is equal to the price of the wine itself. These exactions have occasioned a great deal of distress among the wine growers, by diminishing the consumption. It is a very lamentable thing, when the home produce of a country is so burthened, that the most industrious cannot find a market for the reward of their labours, and poverty increases. This evil always arises from the bad regulations of the government, which should rather cherish than retard the progress of every manufacture towards excellence. It is this ruinous system of taxation which is the dry rot of modern empires.

The wines of France, from these heavy taxes, are found to pay the grower worst when they are of the choicest quality. A second or third rate wine in a large quantity, though bringing a low price, is considered more profitable than a small quantity at a high price; and this is principally owing to the manner in which the wine is taxed. That it must have a very bad effect upon the wines of France, and tend, instead of improving, to deteriorate the better kinds, ought to be obvious to the government. The aim of the wine grower is naturally to produce that which

will pay him best. The better kind of vines will give place to the poorer but more profitable class; and, it is to be feared, that the extent of the mischief thus caused will never be repaired, nay, that the evil may go on increasing until it is past the possibility of cure. The cultivator, too, will be led more and more to neglect improvement of every kind; and in some parts of France, as compared with others, there is now very great room to amend. The depression of the wine grower and his property ought to be especially calculated upon by the government. It should be considered that the labours of the vine dresser are expensive; they are particularly so in places where some of the best wines are produced, as upon steep slopes and heights, where all the work of culture must be executed by hand, as the plough cannot be brought to act in such situations. The little farmers are compelled, from want of machinery, to do all their work themselves. In nothing is the smallness of capital more injurious than in wine growing, and in consequence a heavy taxation is proportionably detrimental. A wine cask holding two hundred and twenty-eight litres of Sauterne, will lose about a twelfth annually by evaporation. If the farmer can afford larger casks, he will lose proportionably less wine. A very large cask of fifty-four hectolitres will only lose a twentieth from that cause. If the farmer can afford casks of one hundred and fifty hectolitres, only a hundredth part will be lost. This holds good in other things connected with the wine manufacture, as well as the vine culture, and points out the true policy of the government, if it be not, like most governments, too obtuse or obstinate to learn.

The persons who are concerned as wine cultivators in France are about 1,800,000; the wine sellers, 240,000.

The commerce of France in wine by sea is largest from the port of Bourdeaux. In 1824, the wines exported from thence amounted to 469,627 hectolitres. The port of the next consequence in the trade is Marseilles, which, in the same year, exported 189,643 hectolitres. The ports which follow are Montpellier 180,158, and Toulon 98,766. Cette

exports largely, and Port Vendres also; the latter is situated close to the Pyrenees. The total exported by sea is about 1,081,655 hectolitres 15 litres. In 1785, the exportation from Bourdeaux was 100,000 pipes; in 1827, but 54,492. France exports about the 88th part of her wine produce.

In 1669 the importation of French wines into England was $\frac{2}{5}$ of her consumption, yet in 1701 it was only 2,051 tuns. From this quantity, the highest point until 1787, there was but one exception, namely, in 1713, when the quantity reached 2,551 tuns. The amount gradually fell to 475 tuns in 1786, while the coarse brandied wines of Portugal rose from 7,408 tuns in 1701, to 12,171 in 1785. In 1786, the duties were reduced to 50*l.* 16*s.* 6*d.* per tun, and French wine was at once imported to the extent of 2,127 tuns, though the year before the quantity was only 475 tuns, which paid 99*l.* 8*s.* 9*d.* per tun. Since that period the average has been about two thousand tuns, though the duties were again raised, while wine from Portugal, the larger proportion of very bad character, which English people were so long condemned by their government to swallow, to the ruin of the stomach, reached twenty thousand tuns. A treaty, which disgraced the good sense of the British government, and ensured the worst wine in Portugal for the English market, had been entered into for forcing down upon wine drinkers such a produce, under the specious pretext of encouraging our woollen manufactures. Good sense has at length conquered prejudice, and the Methuen treaty of 1703, the standing jest of every sound statesman, is rendered powerless of future harm. Englishmen may now drink the wholesome wines of France, cheerful and healthy as they are, without a greater expense of duty than those of Oporto. The good effect of this abrogation of the treaty is already felt.

Burgundy wines are imported into Great Britain in the hogshead of forty-nine gallons. Those of Bourdeaux in the hogshead of fifty-two. The first qualities of French wine reach England in bottle.

The great depôt of wines exported, *par terre*, as the French say, or from the districts of their growth for home consumption, is Paris. The trade is important. It is carried on in the Halle aux Vins, a circular building, one hundred and twenty feet in diameter. The high duties, in the shape of "octroi," are levied at the barriers. The cellars beneath the Halle aux Vins, quai St. Bernard, on the banks of the Seine, will contain four hundred thousand casks. The building was begun by Napoleon, and is a convenient wine exchange, if it may be so denominated. The wine consumed by retail in France, in 1826, was, on a rough calculation, about 14,500,000 hectolitres. By going six feet outside the barriers of a town, the wine may be drank free of the "octroi" duty, hence the wine shops so situated are much visited. The wine sold wholesale, for the most part to French families, was calculated in 1826, at about four millions of hectolitres.

Wine in Paris is not, therefore, as cheap a commodity as it should be. A bottle of good Macon is not to be procured under thirteen pence, or one shilling and threepence. Good Champagne is charged five francs, or four shillings and twopence; Chambertin, La Fitte, and similar wines, five or even six francs, or more. The very inferior wines of Bourdeaux, or Burgundy, may be had at twelve sous, or sixpence sterling, but to an Englishman they are scarcely potable. In Bourdeaux twice as much wine is drank as in Paris, in proportion to the number of the inhabitants, because the duty on the wine there is not so much by one half. A great deal of the wine consumed in Paris is not worth more than twelve shillings and sixpence the hectolitre, yet it carries a duty of seventeen shillings and sixpence! Thus the duty upon wine for home consumption in the French capital, is greater than the duty charged in this country on importation. A hogshead of the best Bourdeaux, or claret, bought on the spot, made up for the British market, being always a mixture, but of a good age, costs nearly fifty pounds, the duty being six-

teen pounds thirteen shillings and sixpence. In England the freight, carriage, bottles, profit of the home merchant, and other matters, swell the amount, but to the importer the best Bordeaux wine may be had under this charge.

In 1829, it appears Bordeaux sent to England 431,509 gallons, and Cette 33,796; while to the Netherlands Bordeaux sent 2,515,193 gallons in the same year, and Cette 520,845.

The cultivation of the vine has increased in France very considerably during the last fifty years. In 1788, there were in vineyard 3,988,800 acres, and in 1829 nearly 5,104,800. The produce has increased in value in proportion. At present the vine grower is borne down by fiscal rapacity, which limits home consumption, and by the prohibitions to the import of foreign articles in exchange for French produce. The blindness of the government is in this respect very surprising. So much evil has this caused, that an estate in the last century producing fifteen thousand francs, scarcely gives any return now. The cost of production is calculated at double the value of the rental, while in other agricultural produce it is only two-fifths of the rental. The following statement is from Dr. Bowring's report, and is, indeed, no very flattering picture of the state to which the government of France has reduced that valuable source of national wealth. It seems strange, if there be no mistake, that it should be in cultivation at all.

The estate of Chollet, valued at 120,000 francs, gives Haut-Brion wine. The extent is about fifty-eight acres English.

	Francs.	Cts.
Cost of cultivation . . .	14,067	15
Produce	7,000	0
	7,067	15
5 per cent. on 120,000 francs .	6,000	0
Loss	13,067	15

This estate is the property of the Chamber of Peers, and

being a government concern, is no doubt managed without regard to expense, as crown lands too often are. The above statement must be exaggerated. But that the revenues of the vineyards have been of late years falling off in the Bordeaux district, there is no doubt, principally for want of a market. The cellars have been every where glutted, and the government is still deaf to applications for removing the prohibitions on trade with foreigners.

The wines of France being the natural production of the climate, which England can never imitate, an exchange for the productions of the British soil, or for such manufactures as France cannot rival in excellence, or cheapness, placed upon a liberal basis, would be of great advantage to both countries, as well as to the constitutions and stomachs of Englishmen. It is to be wished that the wines of France were drank here in preference to all others. The coldness complained of in the varieties commonly introduced, may be easily met by the importation of stronger kinds, still the genuine growth of the vine, and pure in quality. The alcohol in wine combined in the natural way, when drank in that state, is not productive of those complaints of the liver, and similar diseases, which arise from drinking the brandied wines of Portugal, in which the spirit is foreign. This is a remarkable fact. The union of the alcohol, mingled with the other ingredients of the wine by artificial means, is never perfect, and is beyond calculation more pernicious than the strongest natural product. The coldness even of the less spirituous French wines, only arises from the high state of stimulus in which English stomachs are customarily kept. From thence comes so much of the misery of indigestion in this country, and its terrible consequences. All who wish to drink wine that enlivens without injuring the stomach, and cheers without being followed by dulness, will take French wine. To one class of persons, it is true, and that unfortunately a large one, this recommendation is vain, namely, those to whose stomachs the use of alcohol, in its various forms, has been familiar,

whether diluted with water or mingled in the wines of the Peninsula; on such the delicate and generous temper of French wine is lost. The beautiful sun of the south of France is chill to the sooty tenant of the African zone, who lives in continual fire.

Before closing this chapter, a list of various customary French measures is subjoined, many of them fictitious or nominal; but as they may be met with hereafter, it will only be necessary to place them before the reader here, for the sake of explanation. They will be found more fully given in the Appendix. In the wine districts they are now all resolved into hectolitres and litres, by which measures wine is universally sold, however the casks may vary in size. This is a useful regulation, and should be adopted in England, to prevent bottles of fourteen to the dozen being passed off as full measure. If a bottle of wine from the wood is demanded in Paris by the buyer, it is charged at the same price as the litre, which is one-third more; but if the purchaser ask for the litre, it must be given him without extra charge, though it will require an additional bottle to hold a part of it. The French, when they send to a wine shop for their wine, always send two bottles, and demand a litre.

It must be premised, as already observed, that the names applied in various wine districts of France to the casks which they use, differ without reference to the measure; that in the department of the Marne, the *tonneau* is called the *queue*, and so on. By the new and excellent French system of measures, every measure, it must again be borne in mind, is resolved into litre and hectolitre.

The Litre is 61·0280264 English cubic inches, or 2·113 English pints, or a quart is 0·9465 of a litre, while 3·7860 litres make an old English gallon.

The Hectolitre is 26·4 English gallons, or 3·531714693 English cubic feet. The litre, then, is something more than the English quart, which, and the hectolitre of 26·4 English gallons being recollected, the quantities of the provincial and the old measures may be easily comprehended.

The Lot of Lisle is 2·064 litres, or 0·545 gallons.

The Velte is, in some places, 2·017108 English gallons, or 7·60965 litres. At Bordeaux it is 7,177 litres, or 1·896 gallons; at Bayonne 7·390 litres, or 1·952 gallons. At Montpellier it is 7,609 litres. The old velte, also called septier, was 7·60965 litres, or 2.017108 gallons.

The Ohm used at Strasburgh is 46·093 litres, or 12·176 English gallons.

The Millerolle, at Marseilles, is 64·330 litres, or 16·990 English gallons.

The Asnée, at Lyons, is 82·549 litres.

The Quartaut, of Champagne, is 90 litres; in the old French measure 68·4868, or about 18 English gallons.

The Quart, in La Nievre, is 115 litres.

The Barrique, of Limoux, from 100 to 120 litres. The barrique, of Hermitage, 120 litres Of Rochelle, 174·299 litres, or 46·039 gallons. Of Rouen, 195·648 litres, or 51,688 gallons. Of Bordeaux, 228 litres. Of the Basses Pyrennees, three hectolitres.

A Piece of Champagne, of 160 litres, is only sold on the spot to traders, the wine being exported in bottles. A Piece of Hermitage is 210 litres. In the department of the Gard, 185. In the department of the Seine, 228 litres. In Auvergne, 36 veltes. It is an indeterminate measure, from 27 to 100 veltes. In l'Yonne the piece is sometimes 28 veltes, or 213 litres.

A Botte is 426 litres.

The Bareille, of the Rhone, is 240 litres.

A Pipe is indeterminate; from 60 to 100 veltes, less or more.

The Poinçon, of 236 litres, is used in the Loiret.

The Tonneau, of Bordeaux, is a nominal measure, of 4 barrels, or 912 litres. The queue, in the department of the Marne, is the same as the tonneau. In Burgundy it is 60 veltes, or 456 litres, or about 114 English gallons. The old Tonneau de la Marine was 1438·2234 litres.

The Demi queue, in Burgundy, is 30 veltes, or 228 litres. In Châlons it is 220 litres.

The Quartier queue, in Burgundy, is 15 veltes, or 114 litres, or about 28½ gallons.

The Feuillette de Bourgogne is 15 veltes.

The Muid, in Burgundy, is 280 litres. In Languedoc 700, or seven hectolitres.

The Demi Muid, like the muid, differs in different districts. In Roussillon and St. Gilles it is 45 veltes.

Foudres are the largest casks which are made, holding each from five thousand to fifteen, and some even thirty thousand litres.

Besides the separate measures in almost every department, the French formerly enumerated the following, which are given merely to gratify the curious reader.

The Septier, the same as the velte above in some places, though more generally 7·60965 litres, about 2·017108 English gallon.

The Broc, 11·41447 litres.

The French Gallon, 3·8048 litres, or 1·008554 English gallons.

The Quarte, 1·9024 litres.

The Pinte, ·951206 litres, or ·2521385 English gallon.

The Chopine, called also the settier, ·475603 litres; also the half settier.

It will not be amiss here, for the benefit of the drinker of French wines, to mention several terms, employed by the dealers and connoisseurs in speaking of them.

Vin, French for wine generally.

Bouquet is the aromatic smell which is perceived on drawing the cork of any of the finer wines, on their exposure to the air. In some of the better classes of French wine it is highly rich and odorous. It is not a single perfume, and is named *bouquet* from this circumstance. It seems to arise from a union of several agreeable odours, according to the opinion of the initiated.

Sève is applied to the taste of the wine the instant it is

swallowed, composed both of the spirituous quality and aromatic odour united. Yet *vin qui a de la sève* means tart wine.

Aroma spiritueux intends nearly the same thing as *sève*, and both are acquired at uncertain ages of the wine. Infusions of different substances are sometimes used, to impart these virtues.

Cru. This word is applied several ways. It means a vineyard, a particular spot in a vineyard, any vine land generally.

Fumeux—wines quickly affecting the head from alcohol, not from carbonic gas, as Champagne; to the latter the term *montant* is applied.

Velouté wine, of good colour and body; soft upon the palate.

Cuvée, the contents either of a cellar or vat at the vintage.

Vin bourru, thick unfermented wine.

Event, flat wine; wine with a twang of deadness.

Pâteux, thick wine adhering to the mouth.

Plat, wine without body or spirit.

Most of the other terms used furnish a key to their meaning from their obvious derivation, or may be found in any good dictionary.



Champagne.

CHAPTER V.

WINES OF FRANCE—*(Continued).*

WINES OF THE DEPARTMENTS OF THE MARNE, HAUT MARNE, ARDENNES, AND AUBE, COMPREHENDING THE ANCIENT PROVINCE OF CHAMPAGNE—WINES OF THE COTE D'OR, L'YONNE, AND SEINE AND LOIRE, COMPOSING ANCIENT BURGUNDY—WINES OF THE DRÔME, RHÔNE, AND VAUCLUSE, FORMERLY THE LYONNAIS, DAUPHINY, PROVENCE, ORANGE, AND LANGUEDOC—OF THE GIRONDE OR BORDELAIS—OF THE DEPARTMENTS OF THE DORDOGNE, VIENNE, NIÈVRE, LOT, LOT ET GARONNE, MOSELLE, HAUT RHIN, BAS RHIN, &c.

THE wines for which the ancient province of Champagne is celebrated, rank first in excellence among the wines of France. By forming France into departments, Champagne is now divided between the departments of the Ardennes, the Marne, the Aube, and the Haut-Marne. The wines produced there long disputed the palm of excellence with those of Burgundy. Gout had been attributed to their use by certain French physicians. The school of medicine entered, about 1652, into a warm discussion on the respective merits of the two species, and though the public had settled the question long before, did not pronounce in

favour of the wines of Champagne until 1778, about one hundred and twenty-eight years after the dispute commenced!

In 1328, Rheims wine bore a price of ten livres only, while Beaune fetched twenty-eight. In 1559, at the coronation of Francis II., Rheims wines were dearer than Burgundy; but the wine of the Lyonnais carried a higher price. In 1561, these wines had risen in price. In 1571 they were nearly eight times increased beyond the former value. Champagne reached its present perfection and estimation about 1610, at the coronation of Louis XIII. The oldest anecdote which the French possess relative to the excellence of Rheims wine, dates as far back as 1397, when Vincesilaus, king of Bohemia and the Romans, on coming to France to negociate a treaty with Charles VI., arrived at Rheims, and having tasted the wine of Champagne, it is to be presumed for the first time, spun out his diplomatic errand to the longest possible moment, and then gave up all that was required of him, in order to prolong his stay, getting drunk on Champagne daily before dinner. It is said that Francis I. of France, Pope Leo X., Charles V. of Spain, and Henry VIII. of England, had each of them a vineyard at Ay, their own property, and on each vineyard a small house occupied by a superintendant. Thus the genuine article was secured by each sovereign for his own table. If this be true, it shows pretty accurately the length of time during which Champagne wine has been in esteem. The vineyards on the banks of the Marne are those which possess the highest character, producing most of the wine known by the general term of Champagne in other countries. The wines are divided into those of the river and of the mountain, the former being for the most part white.

Champagne wines are further divided into sparkling *(mousseux)*, demi sparkling *(crémans* or *demi mousseux)*, and still wines *(non mousseux)*. Some are white or straw colour, others grey, others rose colour, and some are red.

They are of a light quality in spirit, the average of alcohol in Champagne wine in general, according to Mr. Brande, being but 12·61 per cent.

The entire quantity of wine made in Champagne of all kinds varies with the season; but the average may be taken at 1,560,687 hectolitres, or 40,968,033¾ gallons, from 55,540 hectares, or 138,870 acres of vines[1]. The department of the Marne is that in which the most famous of these wines are made. There are 19,066 hectares of land devoted to the vine in the department, though some say above 20,000, and of this number 110 are situated in the arrondissement of Châlons sur Marne; 6,856 in that of Epernay; 425 in that of St. Menehould; 9,029 in that of Rheims; and 2,646 in that of Vitry sur Marne. The quantity of wine made in the whole department is 422,487 hectolitres, and the value about 11,235,397 francs; of this sum nearly four-fifths in value is made in the arrondissements of Epernay and Rheims. Each hectare gives from 28 to 30 hectolitres. The produce has increased of late years from the improved mode of cultivation. The quantity exported from the department is of the best kind, and amounts to about 103,043 hectolitres annually; the residue is distilled or consumed by the inhabitants. The best red wines are sold in Belgium, and the Rhenish provinces. The Sillery goes to Paris and to England, and the sparkling wines, not only over France, but the entire civilized world. The wine merchants of Paris and Meaux take nearly all the wines made in the arrondissement of Epernay.

[1] The vintage of 1834, which was large and good, gave for Verzenay 3,000 casks, Verzy and Villers-Marmery 1,500; Rilly, Chigny, and Ludes, 1,000; Bouzy 1,000, Ambonnay 1,000, Ay 10,000, Mareuil and Aœnay 3,000, Haut-Villers, Dizy, and Cumières, 4,000; Epernay 4,000, Pierry 4,000, Moussy 2,500, Chouilly 1,500, Cramant 2,000, Avize 8,000, Oger and Mènil 16,000, Vertus 2,000—total 64,500 casks, containing 220 bottles each; making in quantity 14,190,000 bottles. According to the estimate of the number of bottles which could be procured, it appeared that when this vintage came to be bottled, there would be a great deficiency.

The vintage of 1832, gave 480,000 hectolitres, viz. 50,000 in white sparkling or still, 310,000 common red of middling quality, and 120,000 choice red.

The mean price in the arrondissements of Châlons, St. Menehould, and Vitry, which are inferior kinds, is about sixteen francs the hectolitre; those of Vitry bring twenty francs; St. Menehould fifteen; and Châlons about twelve.

Though in England most people understand by Champagne only wine which effervesces, this, as we have seen, is an error. There are many kinds of Champagne wine, but the best are those which froth slightly. They are improved in the drinking by ice, which tends to repress the effervescence; the Sillery has no sparkle at all. Every connoisseur in Champagne will select wine of moderate effervescence, and such wine always carries the best price. When the glass is entirely filled with froth, on pouring out the contents of the bottle, the better qualities of the wine and spirit evaporate. The quantity of spirit in Champagne, as we have seen, is but small, and the residue is a flat meagre fluid.

There is an exquisite delicacy about the wines of Champagne, which is more sensible to the foreigner than that which distinguishes the richest kind of Burgundy to the taste of the French amateur. The French have terms for distinguishing different qualities in their wines, some of which cannot be translated; but the term "delicate" or "fine," as applied to the wines of Champagne, the peculiar "aroma," which remains in the mouth after tasting them, together with the "bouquet," which is understood alone of the perfume, applying to the sense of smell, are terms pretty intelligible to Englishmen, who are drinkers of French wines.

It is on the banks of the Marne that the best effervescing wines are made, or, to follow the French designation, in "the vineyards of the river." We have already noted the general divisions of river and mountain wines, which are of some antiquity in characterising the wines of

this part of France. The French further divide this district, or vine-ground of Rheims, into four general divisions, namely, the river vineyard district, that of the mountain of Rheims, that of the estate of St. Thierry, and that of the valleys of Norrois and Tardenois. There are, moreover, one or two other spots which do not come into these divisions, one of them is on the side of a hill north-east of Rheims.

The river district is situated on a calcareous declivity, open to the south, at the foot of which runs the Marne, from Bisseuil to the borders of the department of the Aisne. The chalk abounds here mingled with stones in the uppermost soil. The vines are as closely planted as possible. On this declivity comes first in order the vine-ground of Ay, which produces on an average, year by year, about 4,320 hectolitres of red wine, valued at sixty francs the hectolitre, and 3,392 hectolitres of white wine at one hundred and thirty; also the vineyards of Mareuil and Dizy, yielding 3,220 hectolitres of red, at forty francs, and 1,970 of white wine, at one hundred and ten. These are the districts which produce Champagne wines of the very first quality known. They are light and delicate, vinous, of the most agreeable taste, and preserve to a great age their virtues and effervescence. When these wines are destitute of the sparkling quality, they rival those of Sillery, as still Champagne, and are frequently preferred to Sillery, because they are lighter and more luscious. The red wines of this quarter also keep well. It yet remains to account for differences in wine of adjoining vineyards here, with apparently the same soil and exposure.

The next vine lands of this district in rank are those of Cumières and Hautvilliers, which yield about 7,130 hectolitres of red wine of the second quality, at fifty francs. Hautvilliers was the spot where Father Perignon, a Benedictine, first introduced the mixing grapes of different qualities in making these wines. This wine resem-

bles that of the hilly district of Rheims in lightness and delicacy, but will not keep to so great an age. In warm seasons it reaches maturity the first year. Formerly white wine made at Hautvilliers rivalled that of Ay, but of late the manufacture has ceased, in consequence of the division of the property on which the wines were produced; the greater part of the vine lands which grew the finest qualities having got into the hands of wine makers who have changed the character of the vines. That of a spot called *la Côte-à-bras* has still a reputation. Some proprietors there who have preserved the old kind of vine still make an excellent white wine. All the other wines of the river are common, and fetch in the market, on the average, only from twenty-five to forty francs.

The mountain or hilly district of Rheims is at the back of the preceding acclivity, and its slope is much less steep than that towards the river. The soil is of the same calcareous description. The prices, however, differ with the reputation of the vineyards. The aspect is east and north. The first vine lands are those of Bouzy and Ambonnay, producing 2,100 hectolitres, either of red or white wine at pleasure, at about one hundred and fifty francs the hectolitre. Next come the vineyards of Verzenay, Sillery, Mailly, and Verzy, producing 2,832 hectolitres of the same kind of wines, at one hundred and thirty francs.

It is here that the best red wines of Champagne are produced. They have good body, are spirituous, fine, and keep their qualities to an advanced age. The red wines of Bouzy approach in bouquet the best wines of Burgundy.

It is from this district that the white still Champagne, called Sillery, is produced. The vineyard is not more than fifty arpents in extent, yielding six casks of two hundred and ten bottles each arpent. The hill on which it stands has an eastern aspect. This wine has more body, is more spirituous than any other white Champagne wine, and is distinguished by a dry and agreeable taste. It is grown

principally on the lands of Verzenay and Mailly, of the blackest grape, of which also the grey bright wine, having the complexion of crystal, is made. It is to be lamented that of late, owing to the changes of property there, they have planted white grapes, that make a very inferior wine, which will not keep half as long. The name of Sillery was given to the wine from that of the soil; after a marquis who improved it, the wine was also styled *vin de la Maréchale.* Very little is now produced in the commune of Sillery, which covers a considerable space of ground. The grape is subjected for making this wine to a less pressure than for red wine, and it is kept longer in wood than the other sorts generally are, or about three years. The quantity made differs every year according to the orders received for it. It is chiefly manufactured for the wine merchants, who buy the proper grape from the proprietors of the vineyards, in proportion to the demand made on them for export. It is perhaps the most durable, as well as wholesome to drink of all the wines of Champagne, the fermentation being more perfect than that of any other species.

The second class of wines, is generally valued at fifty francs, while there are others, such as those of Ville Dommange, which are only worth from twenty-five to thirty francs the hectolitre on the spot. They are made from the vineyards of Ambonnay, Ludes, Chigny, Rilly, Villers-Allerand, and Trois-Puits, and in quantity produce about 9,408 hectolitres. These wines are some of them of tolerable quality, and are mostly sold to foreigners. The rest of the wines of the mountain district are ordinary wines, bringing only from thirty to forty francs the hectolitre, and some only fifteen and twenty.

The third Champagne district, or that of St. Thierry, produces 6,592 hectolitres of delicate wines, bearing prices from thirty to sixty francs, and some ordinary sorts as low as twenty.

The fourth district, namely, the valleys of Norrois and Tardenois, as well as that of the hill side near Rheims,

produces only common red wines, the best of which sell from twenty-five to thirty francs the hectolitre.

In all the distinguished vineyards of Champagne, as, for example, in the river district of Ay, Mareuil, Dizy, Hautvilliers, and Cumières; and at Bouzy, Verzy, Verzenay, Mailly, in the mountain, as well as in many other of the vine lands, they cultivate the black grape, which is called the "golden plant" *(plant doré)*, being a variety of the vine called *pinet* and red and white *pineau*. Crescenzio, who wrote in the thirteenth century, speaks of a vine near Milan, called *pignolus*, which was probably of the same species, especially as an ordinance of the Louvre, of the date of 1394, places the *pinoz*, as then called, above all the common species of vine. The product of the white grape produces a very inferior wine to that from the foregoing fruit. It seems at first singular that the blackest grape should produce wine of the purest white colour, grey, or straw; but such is nevertheless the fact. The price of the vine land differs much. It is greatly subdivided; there are vineyards not exceeding the tenth of an arpent in size. Some productive land will not bring forty pounds per acre English on sale, while spots have been known to sell for eight hundred, which have yielded seven hundred and fifty bottles the acre. The expenses of cultivation about Ay are from 900 francs to 600 francs per hectare. The selling price of vineyards averages about 5,000 francs, —the highest has been 24,000: the lowest 2,500 francs. The number of vine proprietors in the arrondissement of Rheims is 11,903; for the whole department they are not less than 22,500. The produce may average in the districts most noted about 540 gallons English, per acre. But it is well known that certain spots in this department have given 1,200 gallons the English acre.

The still wines of Epernay, both red and white, are inferior to those which are made on the lands of Rheims. The best red wines of Epernay are those of Mardeuil, at the gates of Epernay, those of Damery, Vertus, Monthe-

lon, Cuis, Mancy, Chavost, Moussy, Vinay, and St. Martin d'Ablois. They fetch only middling prices, from forty to sixty francs the hectolitre. The wines of Fleury, Venteuil, Vauciennes, and Boursault, on the Marne, are only to be classed as ordinary wines of the district. Those of Œuilly, Mareuil le Port, Leuvrigny, Croissy, Verneuil, and the canton of Dormans, rank as common wines from twenty-two to thirty francs on the spot. Among the lands where white wines are produced, the vineyard of Pierry, in the neighbourhood of Epernay, is most esteemed. It is dry, spirituous, and will keep longer than any of the other kinds. Varying from one hundred and fifty to twenty francs, the differences in the wines may be easily conjectured.

At Epernay, where the black grape is most cultivated, there are lands which produce wine approaching that of Ay in delicacy, in the abundance of the saccharine principle, and in the fragrance of the bouquet. Though customarily arranged after the wine of Pierry, it may fairly be classed on an equality. The wines from the white grape of Cramant, Avize, Oger, and Ménil, are characterized by their sweetness and liveliness, as well as by the lightness of their effervescence. To a still class, put into bottles when about ten or eleven months old, they give the name of *ptisannes* of Champagne, much recommended by physicians as aperient and diuretic. The grounds of Chouilly, Cuis, Moussey, Vinay, St. Martin d'Ablois, and Grauve, as well as those of Monthelon, Mancy, and Molins, produce wine used in the fabrication of sparkling Champagne, being fit for that purpose alone.

It is proper to explain that the wines are put into casks of one hundred and eighty litres each. But white wines of Champagne are not intended for consumption at these prices in the piece; it is only to be understood of such wines as are thus preserved by the merchants at Epernay and Rheims, when, during the vintage, or for three months after, they wish to hold the stock of the growers, which it

is not convenient at the moment for them to bottle, for it is the general custom among the wine makers to take upon themselves the expense and trouble of bottling. Thus they are enabled to dispose of a small quantity at once, if demanded, and can still wait to the end of the first year for ascertaining the whole of their stock. They suffer the less by breakage, leakage, and filling up of the bottles, and obtain a portion of the profit at once from the immediate sale of a part of their stock to the merchant. The price of a bottle of Champagne paid by the consumer, either in France or abroad, varies more according to the scarcity or abundance of the crop, and the agreement of the seller, than the difference of the quality at the place of growth. The following prices will give an idea of these variations.

The wine of Pierry and Epernay, in a plentiful year, sells from one hundred and thirty to one hundred and fifty francs; in a medium year, from one hundred and eighty to two hundred; in a year of scarcity, from two hundred to two hundred and fifty the piece.

Those of Cramant, Avize, Oger, Ménil, from eighty to one hundred; and from one hundred to two hundred.

Those of Chouilly from sixty to a hundred and fifty francs under such circumstances.

Those of Moussy, Vinay, St. Martin d'Ablois, Cuis, Grauve, Monthelon, Mancy, and Molins, from fifty to sixty; sixty to eighty; or eighty to a hundred.

Sold in bottles by the grower to the merchant in gross; the waste not replaced, and bottles not filled up, 1f. 25c.; 1f. 50c.; 2f. to 2f. 50c.; in medium years 1f. 30c., 2f., and 2f. 50c.; in years of scarcity 2f., 2f. 50c. to 3f. The bottles filled, and no waste in abundant years, 1f. 50c.; 1f. 75c.; 1f. 75c.; 2f. 25c.; 2f. 75c. In years of average product, 1f. 75c.; 2f. 25c.; 2f. 75c. In years of scarcity, 2f. 25c.; 2f. 75c.; 3f.

In bottles sold by the merchant to the consumer in years of abundance, 2f.; 2f. 50c.; 3f.; medium years,

3f. 50c.; years of scarcity, 3f. 50c.; 4f. 50c.; 6f. From 3f. to 3f. 50c. is the average for good quality. Some class the qualities:—The *first* from 3f. to 4f.; the *second* from 2f. 50c. to 3f.; the *third* from 2f. to 2f. 50c. From ten to twenty per cent. fluctuation in price is not common. England and the East Indies take 467,000 bottles annually. The annual exportation is about 2,690,000 bottles, with an increasing demand.

In 1818 there were effervescing wines sold at from one franc twenty-five cents, to one franc fifty cents, after the first month of bottling; but this makes nothing against the foregoing prices. These wines were of a very inferior quality, and being sweetened and seasoned with sugar and spirit, could only answer for instant consumption. Such wines are neither sound nor wholesome, and it is probable are the same that the advertising wine quacks of London puff off by advertisements as the best Champagne. Those who have any regard for their organs of digestion, should avoid them as poison; for though good Champagne is one of the wholesomest wines, the bad is more than commonly pernicious.

Some of the more respectable growers and merchants never keep any Champagne but of the best quality, and never sell under three francs, let the season be as abundant as it may. These are the best persons of whom to buy. They have always the finest stock, and after encountering the first year's loss by breakage, they have a certain property in their cellars, which covers the return of bad seasons.

The best red wines of Epernay are fit for consumption the second year. They gain little by being kept above two years in the wood, but in bottle they lose nothing of their good qualities for six or seven.

The wines of Champagne, whether still or effervescing, white, grey, or rose, whether solely of black or white grapes, or of both mingled, are generally in perfection the third year of bottling. The best wines, however,

gain rather than lose in delicacy for ten, and even twenty years, and are often found good at the age of thirty or forty.

It will not now be amiss to give a cursory view of the mode in which the effervescing wines of Champagne are made. By this means some idea may be formed of the care required in bringing them to a perfection, which has aided in placing them beyond all rivalry.

The vine crop designed for the manufacture of white Champagne is gathered with the greatest care possible. The grapes for the purest wines consist only of those from an approved species of vine. Every grape which has not acquired a perfect maturity; every rotten grape, touched with the frost, or pricked, is rejected. In gathering, or in emptying the baskets, and in the carriage to the press, every motion that can injure the fruit is avoided, as well as the sun's action. On arriving at the press, the baskets, or whatever the grapes are carried upon, are placed in the shade in a cool spot. When the quantity is sufficient for a pressing, they are heaped with as little motion as possible on the press, and the bunches are very carefully arranged.

The must is not immediately casked, but is placed in a vat, where it remains for six, ten, or fifteen hours, for the dregs to deposit. When it begins to ferment, it is immediately transferred to the cask.

Perhaps there are none of the productions of the soil which require more care than the grape, to make it produce the delicious wines in perfection. In no country is the art of making wine so well understood as in France, and being a commodity which it is impossible to equal except in a soil and temperature of exactly the same character, it is improbable that country will be excelled by any other in her staple product. An advantage of no slight moment, when compared to those of her manufactures which time may enable foreigners to equal, and in many cases to surpass. The following is an account of

the process of bottling, and the treatment of the wines, of Champagne, before they are ready for the market.

About Christmas, after the vintage, the fermentation being complete, the wine is racked. This is always done in dry weather, and if possible during frost. A month after it is racked a second time, and fined with isinglass. Before it is bottled it undergoes a third racking, and a second fining. There are some makers of wine who only fine it once after the second racking, and immediately bottle it, taking care that it has been well fined in the cask; others rack it twice, but fine it at each racking. The best wines are always able to bear three rackings, and two finings; and the benefit of such repetitions is found of the utmost importance afterwards in managing the wine when bottled.

The wine which is designed to effervesce, and the *ptisannes* and wines of the third pressing, are racked and fined in March and April in the cellar, out of which they are only taken in bottles. That which is designed to be still wine, is not bottled at Epernay until autumn, and is taken to the underground cellar in April or May. This is not the practice at Rheims with the Sillery. It has been found there the most advantageous plan to bottle the wine in the month of January, though at the risque of its imbibing the sparkling quality. In this case, forthwith after the first racking, which is called *debourbage*, it is fined, and drawn off in ten or twelve days. Still wines are found by this means to be much improved in character.

The great complaint against Champagne wine has been that it cannot be obtained of an uniform quality. This is principally owing to its being put into casks of a hundred and sixty litres only in size. The wine in every cask will not therefore be alike, for the minutest difference in the operation of preparing it for the market, will alter the quality. To remedy this evil, so justly complained of, Messrs. Mumm, Geisler and Co. at Rheims, have provided

tuns holding twelve thousand litres each, which they imported from the palatinate, and they have found it a mode that fully obviates this evil. (See Appendix, No. XIII.)

The strength of the bottles, and their uniform thickness, for the sparkling wines, are most carefully ascertained. Every bottle with an air bubble in the glass, or with too long or too narrow a neck, or with the least malformation, in short with any thing which may be supposed to affect the production or retention of the effervescence, is put by for the red wine. The bottles too are jingled together in pairs, one against the other, and those which crack, or break, are carried in account against the maker.

Some idea of the quantity of effervescing wine made in the department of the Marne, in the arrondissement of Epernay alone, is obtained from the fact that no less than thirty-three thousand hectolitres, or eight hundred and sixty-six thousand gallons, have been manufactured in one year. A third was purchased by the merchants of Rheims, and at least as much more has been made in one year in this last arrondissement.

In the month of March or April, after the wine designed for effervescence is made, it is put into bottle. Some begin as early as February, at the risk of exposing the wine to failure, or the bottles to more extended breakage in case they succeed. Fifteen per cent. is a common loss, sometimes it reaches much higher.

The effervescence is owing to the carbonic acid gas, produced in the process of fermentation. This gas being resisted in the fermentation of the white wine, scarcely begins to develope itself in the cask, but is very quickly reproduced in bottle. In this process the saccharine and tartarous principles are decomposed. If the latter principle predominate, the wine effervesces strongly, but is weak; if the saccharine principle be considerable, and the alcohol found in sufficient quantity to limit its decomposition, the quality is good. The wines do not effervesce in uniform times, some will do it after being in bottle fifteen

days, others will demand as many months. One wine will require a change of temperature, and must be brought from the underground cellar to another on the surface; a third will not exhibit the desired quality until August. One kind, when patience is exhausted, and the effervescence so long expected is given up, will give it all of a sudden. Another wine standing until the following year without this action, must then be mingled with the product of a new vineyard, which is known to abound in the effervescing principle, such as that of the white grapes of Avize. The effervescence of the Champagne wine, considered in all its bearings, is most uncertain and changeable, even in the hands of those best acquainted, through experience, with its management. The difference of the spot of growth; the mixture; the process, more or less careful, in the making; the casking and preservation in the wood; the glass of the bottles; the aspect of the cellars; the number and direction of the air holes; the greater or less depth, and the soil in which the cellars are situated; all have a varied, and often an inexplicable influence on the phenomena of effervescence.

It will not be amiss to follow up the present subject in its details, in order that the reader may judge of the attention necessary in an operation, to a stranger, apparently the least important relative to the manufacture of this delicious wine.

The bottles must be new, having been some days preceding rinsed twice in a large quantity of water, and shotted. Five workmen are required to manage them in what is called the workshop, or *atelier*.

The barrel heads are bored, and a little brass pipe inserted in them with a fine gauze strainer, to prevent the smallest substance from passing. The bottles are filled so as to allow about two inches' space between the wine and the cork. This space diminishes during the time the gas is forming; and in those bottles which burst, it ap-

pears that the void is filled up entirely by the expansion of the liquid.

The workman whose duty it is to fill the bottles, passes them by his right side to the principal operator, who sits on a stool, having before him a little table, covered with sheet lead, and not higher than his knees. He takes the bottle, inspects the allowance left between the wine and the place the cork will occupy, regulates it very nicely, chooses a cork, moistens it, introduces it into the bottle, and strikes it forcibly two or three times with a wooden mallet, so smartly that it would almost be thought the bottle must be broken by the violence of the blows, but fracture is rare in the hands of an experienced workman, who has paid attention to placing his bottle solidly, and resting it with a perfectly even pressure upon its bottom.

The bottle thus corked is passed again by the right hand to another workman, seated in the same manner as the foregoing, who crosses it with packthread, very strongly tied, and then hands it over to a fourth, who has a pincers and wire by him: he wires it, twists and cuts the wire, and gives it to a youth, who places the bottles on their bottoms in the form of a regular parallelogram, so that they can be counted in a moment. The daily labour for a workshop is calculated at eight casks, of one hundred and eighty litres each, or a drawing of sixteen or seventeen hundred bottles. M. Moët, of Epernay, who deals in the bottled wine, has constantly from five to six hundred thousand bottles in store, and sometimes no less than ten of his workshops are in full employ.

The cellars of M. Moët at Epernay, are in the lime-stone rock, and of immense extent. The piles of bottles render it a labyrinth. They rise to the height of six feet.

The bottles are arranged in heaps *(en tas)* in the lower cellars. They are carried down by means of baskets, which enclose each twenty-five ozier cases for the bottles. Two workmen, by means of leather belts drawn through the

handles, transport them. The heap or pile runs along the wall of the cellar, most commonly for its entire length. Among the wholesale merchants slopes are prepared in cement for the piles, having gutters to carry off the wine from the broken bottles, and also reservoirs to collect it.

The bottles are arranged horizontally, one against the other. The lowest row has the necks turned to the wall; and the bottles placed upon laths. The bottles thus situated indicate the vacant space left between the wine and the cork, just at the spot where the bend of the bottle takes place to form the neck, by which the diminution in the void space is easily seen. Small wedges secure the first range of bottles, and upon them a second range is placed the other way, or with the bottom of the bottles towards the wall. All the rows are placed on laths, the corks of one row one way, and the other the reverse. The piles of bottles are thus arranged nearly in the same manner as in English bins, but are carried to the height of five or six feet. This they call in France to heap them *(mettre en tas, ou entreiller)*.

The pile is very solid, and any of the bottles with the necks to the wall can be withdrawn at pleasure, by which means they can be examined, to observe if they are "up," as it is termed in England. If not, they must be got into that state, let the expence amount to what it may. A bottle drawn from the heap to examine if it be in a proper state, is held horizontally, when a deposition is observed, which the workmen call the *griffe*, or claw, from its branching appearance. The indication of a bottle's breaking is the disappearance of the vacancy below the cork before spoken of, by the expansion of the carbonic acid gas. It is generally in July and August that this breakage happens, and that considerable loss ensues. In ordinary cases, indeed, from four to ten per cent. is the amount. Sometimes, however, it amounts to thirty and forty per cent. It is very remarkable, too, such is the uncertainty of the process, that of two piles in the same part of the cellar, of the very

same wine, not a bottle shall be left of one, while the other remains without effervescence at all. A current of fresh air will frequently make the wine develope its effervescence furiously. The proprietor of the wines is every year placed in the alternative of suffering great loss by breakage, or is put to great expence in making wine effervesce that will not naturally develope itself. Of the two evils he prefers submitting to breakage from too great effervescence, rather than being put to the trouble and expence of correcting the inertness of the liquid. If the breakage be not more than eight or ten per cent., the owner does not trouble himself further about it. If it become more serious, he has the pile taken down, and the bottles placed upright on their bottoms for a time, which is longer or shorter, as he judges most advisable. This makes the quality of one bottle of wine somewhat different from another. Sometimes he removes it into a deeper cellar, or finally uncorks it, to disengage the overabundant gas, and to re-establish the void under the cork. This last operation is naturally expensive. It happens that when the gas developes itself with furious rapidity, the wine is wasted in large quantities, and it is difficult to save any portion of it. Even that which is least deteriorated is of bad quality. The piles, as before observed, are longitudinal, and are parallel to each other, with a very small space between each pile. The daily breakage, before it reaches its fullest extent, will be in one day perhaps five bottles, another ten, the next fifteen. Those piles which may have the smallest number broken, still fly day by day among the mass, and scatter their contents upon the sound bottles. Sometimes a fragment of a bottle is left, which contains a good proportion of its contents. In a short time this becomes acid from fermentation, and finally putrid; during the continuance of the breakage, the broken bottles which lie higher in the pile mingle their contents with what is spoiled, resting in the fragments beneath. The overflow runs together into gutters in the floor. When there are many of these accidents the air of

WINE INSTITUTE
SAN FRANCISCO

the cellar becomes foul, and charged with new principles of fermentation, which tend to increase the loss. Some merchants throw water over the piles of bottles two or three times a week during the period of breakage, to correct the evil. The workmen are obliged to enter the cellars with wire masks, to guard against the fragments of glass when the breakage is frequent, as in the month of August, when the fragments are often projected with considerable force.

The breakage ceases in the month of September, and in October they "lift the pile," as they style it, which is done simply by taking the bottles down, one and one, putting aside the broken ones, and setting on their bottoms those which appear, in spite of the cork and sealing, which are entire, to have stirred a little, upon examining the vacant space in the neck. Bottles are sometimes found in this state to have diminished in quantity to the amount of one-half, by evaporation. This loss must be replaced. In the other bottles there is observed a deposition which it is necessary to remove. For this latter purpose the bottles are first placed in an inclined position of about twenty-five degrees, and without removing them, a shake is given to each twice or thrice a day, to detach the sediment. Planks, having holes in them for the necks of the bottles, are placed in the cellar to receive them, thus slopingly, three or four thousand together. For ten or fifteen days they are submitted to the before-mentioned agitation, which is managed by the workmen with some dexterity, so as to place all the deposition in the neck next to the cork, and leave the wine perfectly limpid. Each bottle is then taken by the bottom, kept carefully in its reversed position, and the wire and twine being broken, the bottle resting between the workman's knees, the cork is dexterously withdrawn, so as to admit an explosion of the gas, which carries the deposition with it. An index is then introduced into the bottle, to measure the height to which the wine should ascend, and the deficiency is immediately made good with wine that has before undergone a similar operation. As it was by no means an

easy task to do this, from the evaporation of the gas, while the bottle was open, an instrument has been invented, and is every where used for the purpose, which it is not necessary to describe here. The bottle is then a second time corked, and wired.

The wine is now ready to be sent away by the maker. The bottles are arranged in a pile as before; but if they remain any time longer in the cellar they are uncorked, and submitted to a second disengagement *(degagement*[1]*)* of the deposition, and sometimes to a third, for it is a strict rule never to send Champagne out of the maker's hand without such an operation, about fifteen days preceding its removal. If this were not done, the deposit would affect the clearness of the wine in the act of transporting it. Thus the process, to the last moment the wine remains in the maker's hands, is troublesome and expensive. Sometimes, too, in the second year of its age, the wine will break the bottles, though such breakage will be very limited, it generally remaining tolerably quiet.

The non-effervescing wines, if they are of the white species, are all submitted to the operation of uncorking and clearing at least once before being sent out of the maker's hand.

The white wines of Champagne do not admit of being mixed with any but those of their own growth. The wines of Ay are sometimes mingled with those of Cramant, Avize, Oger, and Ménil, to produce the gas more favourably; and the makers in those places have recourse to that of Ay for a similar purpose, from its abounding in the saccharine principle. When mixtures take place in some districts they are made simply to meet the taste of the consumer. Wine which would please a Parisian palate would not be drank at Frankfort. These mixtures are

[1] This operation is called *degorgement* in some works on wine. *Degagement* means freeing, and is more scientific in application:—*degorgement* means clearing a pipe stopped up to an overflow. *Degagement* is the French word, signifying to disengage or free, and is here scientifically applied.

called assortments. They take place in first making the wine by purchases from other growths; it is done very soon after the wine is made. For the purpose of bringing wine to perfection this way, many makers have in their cellars vats denominated *foudres*, which will contain from thirty to one hundred hectolitres each.

Mixtures are not often made of the effervescing wines. They generally remain the pure production of the spots the names of which they bear.

The red wines are differently assorted. The maker often mingles the productions of his best vines together. The dealer in white wines, who happens to be the proprietor of vineyards, buys red wines of the third class, strong in colour and pure in taste, which he mingles with his wines of the fourth and fifth of his white pressings, thus ameliorating them. Experience teaches the maker of red wines, two or three years in wood and weak in quality, that it is a useful custom to mingle with each piece ten or twelve litres of very generous wine from the south, which improves them, and adds to their body.

The grey Champagne wine is obtained by treading the grapes for a quarter of an hour before they are submitted to the press. A rose-coloured wine is obtained by continuing this process a longer period; but in the arrondissement of Rheims, the rose-coloured wines are only wines of the second quality, lightly tinged with a small quantity of very strong red wine, or with a few drops of a liquor made at Fismes, from elder-berries. It is needless to say, that both the taste and quality of the wine are injured by this mixture. Indeed no one who knows what the wines are at all, would drink rose-coloured Champagne if he could obtain the other kinds.

In Haut Marne a rose-coloured wine is made called *tocanne* in the country. The must is racked after being twenty-four hours in the vat. White wine is also made there with the red grape, which is pressed without treading, and the murk thrown into the vat. The *pineau* plant

is used. The wine made at Montsaugeon will keep many years in bottle. The price of the best kind is thirty-five francs the hectolitre.

The red wines of Champagne are little known in England. Verzy, Verzenay, Mailly, and St. Basle, near Rheims, produce what are called the mountain wines. They are of excellent quality, and the wines of Bouzy in particular are distinguished by great delicacy of flavour. The red wine of the Clos de St. Thierry, a league from Rheims, is of a quality between Burgundy and Champagne, and is very highly esteemed by the connoisseur. The price is from thirty to sixty francs the hectolitre. Aubigny produces a delicate red wine, and Montsaugeon a red wine which keeps well for forty years, though of a very delicate quality.

The department of Aisne, part of ancient Picardy, produces 271,717 hectolitres of wine, both red and white, at about thirty-two francs. Of these wines the most distinguished are those of Chateau-Thierry, which are white, and are a good part of them bought by the merchants of Epernay, who, after mixing them, sell them as Champagne. These wines are delicate, but they want body. Those of Essone and Azy bring twenty francs the hectolitre. The red wines are consumed in the department, or sent to Paris. Sugar has been mixed with some of the wines here in a small proportion, and found to improve them. M. Sarrazin, of Verdilly, by putting three or four pounds of sugar to each piece of his wine, of two hectolitres, nearly doubled their selling value. This is easily accounted for; the grape, from the northern temperature of the department, affords less saccharine matter than a stronger sun gives in more southern situations. The quantity of wine given out by the vine here is great. At Soissons it is said to be no less than forty-five hectolitres per hectare, or 1180 gallons every $2\frac{1}{2}$ acres!

In the department of Aube, formerly part both of Burgundy and Champagne, 572,870 hectolitres of wine

are made, the greater part of ordinary quality. Some pieces are, however, manufactured with care, from the *pineau*, by selecting the riper grapes, which sell at double price. In the midst of ordinary vines in the cantons of Essoyes, those of Mussy, Viviers, and Neuville are noted for their delicacy, owing to a difference in the soil, a more careful choice of the plant, and a happier aspect. At Neuville there is a hill side, called Gravilliers, where a white wine, luscious, and very agreeable to the palate, is made. It will not effervesce like Champagne, but is simply creaming. Only five hundred hectolitres are made, at forty francs.

At Ricey there are three growths, the first of which averages fifty francs. These wines are light, agreeably-tasted, but a little heady. Some rose-coloured wine is also made at Ricey. At Bar sur Aube an effervescing wine is manufactured with a white grape called *arbanne*. It is gathered when covered with dew, and instantly pressed; it is then left until the following February, when it is racked, fined, and, in order to become sparkling, put into bottles during the full moon in March.

It is useless here to particularize every variety of wine produced in Champagne. Some classes are too meagre to attract the attention of foreigners, while others will not bear exportation. It suffices to remark that in no other spot on the globe is the art of making wine of such a delicate flavour so well understood, and that the great pains taken, and the labour requisite to bring it to perfection, added to the loss in the process of effervescence, and not the scarcity of the grape, as some pretend, are the causes of the high price of the wines in comparison with other sorts. In truth, they are an article of very highly finished manufacture.

The first class of Champagne wine, beginning with the white, for which it is most celebrated, is to recapitulate, in some degree, Sillery, a still wine, with its

dry taste, fine amber colour, rich body and delicious bouquet. The wine called *vin du roi*, is much esteemed in foreign countries. Ay, an effervescing wine, ranks next in estimation; Mareuil nearly equals it. Pierry gives a drier wine, which will keep longer than those of Ay, and nearly equals them in quality: there is in them a slight flinty taste peculiar to themselves. Dizy follows next, and lastly, Epernay, part of the wines of which are inferior, and part equal to those of Ay. The wines, called *Closet*, of Epernay, may rank with any grown at Ay.

The second class comprises those of Hautvilliers, about nine miles from Rheims, formerly equal to any wines in Champagne. Then the wines of the vineyards of Cramant, Avize, Oger, and Ménil, all near Epernay, and made of white grapes, which are excellent; they are often mingled with the wines of Ay to great advantage, by ensuring their preservation.

In the third class may be comprised some tolerably good wines and inferior sorts, none of which are exported, except by those who sell very low priced Champagne abroad, for the "best," as they term it. Some of these inferior kinds are produced at Chouilly, Monthelon, Grauves, Mancy, Beaumont, and other places near Rheims. They do not possess body unless mingled with stronger growths. In fact, though pleasant drinking at home, they are not fit for exportation. The first two classes above enumerated should alone be purchased by foreigners.

The first class in the red is the Clos de St. Thierry, which mingles the best qualities of Burgundy with those of Champagne. Vergenay, St. Basle, Mailly, Verzy, and Bouzy, produce wines held in considerable repute. In the second class may be reckoned the wines of Cumières, near Epernay, Chigny, Ludes, and Villers Allerand, near Rheims. The third class of wines comprise those of the Terres de St. Thierry, Ecueil, Avenay, Vertus, Villedom-

mange, Champillon, and Damery. There are other kinds, which need not to be enumerated, from the lowness of their quality.

BURGUNDY.

Ancient Burgundy now forms the three departments of the Côte d'Or, the Saone et Loire, and the Yonne. The wine district is situated under the forty-sixth and forty-eighth degrees of latitude, and is about sixty leagues long by thirty wide[1]. The most celebrated district is the Côte d'Or, thus named on account of the richness of its vineyards. It consists for the most part of a chain of gentle calcareous hills, which extend north-east and south-west from Dijon into the department of the Saone and Loire, including a small part of the arrondissement of Dijon and all that of Beaune. One side of these hills presents an eastern, and one a south and south-eastern aspect, which are highly favourable to the growth of the vine. The vineyards cover the elevations nearly the whole length of their range, at the bases of which a plain of argillaceous deep reddish earth extends itself, rich in agricultural produce of another species. The training of the vines is after the low method, on sticks about three feet long.

The superficies devoted to vine cultivation in the department of Côte d'Or is about 25,351 hectares, or 63,378 acres; of which the arrondissement of Dijon contains 6,912, Beaune 11,789, Châtillon sur Seine 2,600, and Semur 4,050.

The department of the Saone and Loire, the least important district of Burgundy as respects the quality of the wines, has 30,708 hectares, or 76,775 acres of vineyards. Of these 13,954 belong to the arrondissement of Macon, 4,208 to Autun, 7,248 to Châlons sur Soane, 4,269 to that of Charolles, and 1,029 to that of Louhans.

[1] The common French league is two miles, three furlongs, and fifteen poles English.

The third district of Burgundy, the department of the Yonne, nearly equals the Côte d'Or in the quality of its produce, while its vineyards are more extensive, containing no less than 33,630 hectares, or 84,075 acres of surface. Of these the arrondissement of Auxerre holds 13,960, Avallon 4,000, Joigny 6,083, Sens 4,270, and Tonnerre 5,317.

The total of hectares of vineyards in Burgundy is 89,689, or 224,223 acres. The value of the wines produced in the Côte d'Or is 15,473,530 francs, amounting to 578,252 hectolitres, averaging 22,81 each hectare. The total value in the Saone et Loire from 660,942 hectolitres, averaging 21,52⅕ each hectare, is 13,027,079 francs. The produce in the Yonne amounts in quantity to 886,604 hectolitres, at 23,39½, in value 23,638,886 francs. Thus the total annual value of the wines of Burgundy, in years of ordinary production, amounts to 52,139,495 francs. About a million of hectolitres, out of 2,125,798, are consumed in the three departments composing the ancient province: the rest is exported to different parts of France and to foreign countries, and naturally consists of the wines of the best quality. The red wines of Champagne resemble them most in character. The vine districts of Burgundy are known in the country by the divisions of Côte de Nuits, Côte de Beaune, and Côte Chalonnaise.

The difference of the qualities of the wine may be judged by the following lists of prices, taking for example the arrondissement of Beaune, in the Côte d'Or. There 2,300 hectolitres, of superior wine, are produced at one hundred and twenty-five francs each; and 17,700 at ninety-five; 45,000 of fine wines, at sixty; 60,000 of good ordinary, at thirty; and 113,670 of common, at eighteen francs. This may serve as a specimen of the other districts in respect to quality, except that in the department of the Saone and Loire eighty francs the hectolitre is the highest price, and fifteen the lowest. In the department of the Yonne the

higher classes of red Burgundy fetch from three hundred to four hundred francs the muid[1], or rather under one hundred and twenty-five the hectolitre, while the lowest bring but fourteen francs. The white wines bring from ninety-eight to twenty-three. Thus the white wines neither rise as high nor sink as low in price as the red. The quantity of alcohol in these wines is said to be 13·50, but in this respect there is a considerable variation in the experiments, as no two wines are exactly alike in point of strength.

Burgundy is perhaps the most perfect of all the known wines in the qualities that are deemed most essential to vinous perfection. The flavour is delicious, the bouquet exquisite, and the superior delicacy which it possesses, justly entitles it to be held first in estimation of all the red wines known. It cannot be mixed with any other; even two of the first growth, mingled, deteriorate the quality, and injure the bouquet.

It is unnecessary to go into the history of the lower growths of the wines of Burgundy, because they are rarely exported. It will suffice to take a cursory notice of them, and dwell longest upon those wines which are best known out of France. The celebrated districts have been enumerated on the preceding page, namely, the Nuits, Beaune, and Châlonnaise.

The fine wines of Upper Burgundy, in the arrondissement of Dijon, are the produce of about seven hundred hectares, while in the arrondissement of Beaune seven thousand are cultivated for making the better growths. The arrondissement of Dijon, near Gevray, produces the red and white Chambertin. They also make an effervescing Chambertin, a wine only inferior to very good Champagne, but it wants the delicate bouquet of Champagne, by the absence of which it is easily detected. The French complain of its having too much strength, but this would recommend it in England. It is a very delicate wine not-

[1] Of two hundred and eighty litres, or 73·930 gallons.

withstanding, and highly agreeable to the palate. It has been recently imported into London, and is much commended. In spirit it is perhaps a little above the average of Champagne, which it resembles so much, that persons, not judges, might easily mistake the one for the other. The principal plants used are those called the *noirien* and *pineau*. The *gibaudot* and the *gamet* are used for the inferior kinds of wine, and the *chaudenay* for white, gathered at the latest period, and carefully assorted. The Chambertin of Dijon rivals the best wine produced in the vine ground of Beaune for excellence. The vineyard that yields it is very small. The soil is gravelly with loam, the gravel calcareous, the subsoil marl with small shells. It is a wine of great fulness, keeps well, and the aroma is perfect. At Bèze, St. Jacques, Mazy, Véroilles, Musigny, Chambolle, the Clos Bernardon, du Roi, of the Chapitre, of Chenôve, of Marcs d'Or, of Violettes, of Dijon, in the commune of that name, most excellent wine is made. In the Clos de la Perrière, in the commune of Fixin, belonging to M. Montmort, a wine in quality and value equal to Chambertin is grown. Many of these vineyards produce white wines as well as red.

In Beaune, as already stated, the wine country is much more extensive than in Dijon. The aspect, as before observed, is north-east and south-west, being the direction of the main road conducting from Dijon to Châlons sur Saone, passing through the towns of Beaune and Nuits, both names familiar to connoisseurs in wine. The first commune is Vougeot. Upon the right hand, on leaving the village, the vineyard is seen extending perhaps four hundred yards along the side of the road. It forms an enclosure of about forty-eight hectares, 112½ acres English, and sold for 1,200,000 francs. The aspect is east-south-east, and the slope of the ground makes an angle of from three to four degrees. Here is produced the celebrated wine called Clos Vougeot. The upper part of the land turns a little more south, forming an angle of five

or six degrees. The soil upon the surface differs in this vineyard. The lower part is clay, while the uppermost has a mixture of lime, and there the best wine is grown. The average is about two hogsheads and half the English acre. No manure is used, but the soil from the bottom of the vineyard is carried up and mingled with that at the top. Above this vineyard is another choice spot, called the Esséjaux, which is much esteemed, but less so than the higher part of the Clos Vougeot. Further on is the Vosnes, a village which produces the most exquisite wines that can be drank, uniting to richness of colour, the most delicate perfume, a racy flavour, fine aroma, and spirit. The most celebrated of these wines are the Romanée St. Vivant, (so called from a monastery of that name,) Romanée-Conti, Richebourg, and la Tache. The vineyard producing the first-mentioned wine is below those which yield the Richebourg and Romanée Conti, and contains only ten hectares of ground. The Romanée Conti is considered the most perfect and best wine in Burgundy. Ouvrard, the contractor, bought this vineyard for 80,000 francs. The wine is produced in an inclosure of about two hectares in extent, forming a parallelogram, and the quantity made is very small. The Richebourg inclosure, of the same form, contains only about six hectares. The aspect of the Romanée Conti is south-east, and the ground forms an angle of five degrees in slope. There is no difference in the management of this wine from that of the neighbouring growths.

Continuing to follow the road; about a league from Vosnes is the small town of Nuits. A part of the ground extends south-west, and is mostly flat. Upon this superior wines are grown; and among them, on a spot of only six hectares in extent, in a slope with a south-east aspect of not more than three or four degrees, the well-known St. Georges, of exquisite flavour, delicious bouquet, and great delicacy. The other vineyards on the road produce wines of ordinary quality. In the com-

mune of Aloxe, a wine called Corton is grown, which is in repute for its bouquet, delicacy, and brilliant colour. The ground from which this wine is made gives only ten or twelve litres of wine each hectare, of which there are but forty-six. Nothing is more remarkable or unaccountable than the difference of production in these fine wine districts. The most delicious wine is sometimes grown on one little spot only, in the midst of vineyards which produce no other but of the ordinary quality; while in another place the product of a vineyard, in proportion to its surface, shall be incredibly small, yet of exquisite quality; at the same time, in the soil, aspect, treatment as to culture, and species of plant, there shall be no perceptible difference to the eye of the most experienced wine grower. In such a district as the Côte d'Or, it is difference of site rather than of treatment, to which the superior wine owes its repute, for there is no want of competition in labouring after excellence.

Bordering on Aloxe is the vineyard of Beaune, a well-known wine of a very agreeable character. Not far from thence is produced the Volnay, a fine, delicate, light wine, with a taste of the raspberry, and Pomard, of somewhat more body than Volnay, and therefore better calculated to keep, especially in warm climates. These are wines which, when genuine, bear a good character all over the world.

Between Volnay and Meursault the vineyard of Santenot is situated; it consists of twelve hectares, upon a southern slope. The higher part produces a celebrated white wine, called Meursault; the middle and lower a red, which is considered preferable to Volnay. In the neighbourhood of Meursault are grown the wines denominated "passe-tous-grains" by the French, and the dry white wines, of a slight sulphurous taste, much drank in hot seasons, called wine of Genévrières, of the Goutte d'Or, and of Perrières. The quantity of hectares on which these last wines are grown is but sixteen. The situation to the south-west of Meursault, where it joins Puligny, is

noted for the delicious white wine called Mont-Rachet, of exquisite perfume, and deemed the most perfect white wine of Burgundy, and even of France, rivalling Tokay itself in the opinion of many French connoisseurs. The vine ground of Mont-Rachet is divided into *l'Ainé* Mont-Rachet, *le Chevalier* Mont-Rachet, and *le Batard* Mont-Rachet. The vineyard of the Chevalier, which is on the higher part of the ground, is a slope of about twelve or fifteen degrees, and contains eighteen hectares. L'Ainé, or the true Mont-Rachet, is but six or seven hectares. The Batard is only separated from the two other vineyards by the road which leads from Puligny to Chassagne, and contains about twelve hectares. These vineyards have all the same south-eastern aspect, yet the wine from them is so different in quality, that while Mont-Rachet sells for twelve hundred francs the hectolitre, the Chevalier brings but six hundred, and the Batard only four hundred. There are two vine grounds near, called the Perrières and Clavoyon, which produce white wines, sought after only from their vicinity to Mont-Rachet.

Chassagne, not far from Puligny, is a productive vine land. The canton of Morgeot contains twenty hectares, which produce a red wine, much sought after. It faces the south-west, and owes its good qualities to its excellent aspect. The village of Santenay, on the borders of the department terminating the elevated land, grows some choice wines, such as Clos-Tavannes, Clos-Pitois, and the Gravières, though not equal in quality to those already enumerated.

There is an infinite variety in the wines of Burgundy, which an Englishman can hardly comprehend. Accustomed to wines less delicate than intoxicating, and regardful rather of the quantity than quality of what he takes, his favourite beverage is chosen more for strength than perfection of flavour. The nature of the soil, the aspect, the season, the plant, and mode of culture, as well as the making, each and all equally affect the quality of these

wines more than wines in general, on account of their great delicacy. The most finished and perfect Burgundies, the French say, are deteriorated by so short a voyage as that across the Channel from Calais to Dover, including, of course, the journey to the former place; and they are never sent away but in bottle.

The best Burgundies, called *les têtes de cuves*, are from the choicest vines, namely, the *noirien* and *pineau*, grown on the best spots in the vineyard, having the finest aspect. These rank first in quality, and are wines, when well made in favourable seasons, which include every excellence that the most choice palate can appreciate. Fine colour, enough of spirit, raciness, good body, great fineness, an aroma and bouquet very powerful, strong in odour, and that peculiar taste which so remarkably distinguishes them from all the other wines of France. The next, called *les premières cuvées*, or *vins de primeur*, approximate very closely to the first class in quality, except that the perfume is not quite so high. Good wines, *les bonnes cuvées*, which are grown on a soil less favourable than the foregoing, and in an aspect inferior, fairly rank third in quality. Then come *les cuveés rondes*, having the same colour as the foregoing, and equal in strength, but wanting their full fineness and bouquet. Next they distinguish *les seconde et troisième cuvées*, the colour of which is often weak to the preceding growths, they are deficient in spirit, and destitute of fineness and flavour. These three last classes of the wines of Burgundy come from the same species of vine as the two first, but the soil is inferior, or the aspect not so good, being perhaps more humid, or less exposed to the sun. Their abundance compensates to the grower for their inferiority.

Of the common red wines of the Côte d'Or there are two sorts, called wines *de tous grains*, or *passe tous grains*, which come from a mixture of the *noirien* and *pineau* grape, with the *gamay*. The wine de tous grains is an ordinary wine, which, when good, is much esteemed in hot seasons. It has a deep colour, tending to the violet,

much body, sufficient spirit, and after a certain age, a little bouquet. It is a coarse wine, but will keep a long time without sickness of any kind, and is much valued for sustaining such wines as tend to dissolution. It is often better than those which are called "les seconde et troisième cuvées," of a middling season.

There are only two sorts of white wine in the Côte d'Or: the first made from the white *pineau*, and the second from the common plant mingled with it. These two sorts are each marked by two or three sub-divisions. The first in quality, the finest and best, is the Mont-Rachet already mentioned. It is distinguishable in good years for its fineness, lightness, bouquet, and exquisite delicacy, having spirit without too great dryness, and a luscious taste without cloying. In making, they endeavour to keep it with as little colour of any kind as possible, no doubt for the purpose of preserving that lightness of hue which white wines rarely possess, being yellowed, probably, by the absorption of oxygen, which incorporates with them while in contact with the atmosphere.

Most of the other white wines of the Côte d'Or differ most essentially from that of Mont-Rachet. The common kinds are more or less flat, acid, without body, and deficient in fineness and strength.

The prices of the wines of the Côte d'Or differ greatly, and cannot be fixed. The "têtes de cuvées," or choice products in the best years, are never sold under a thousand francs the queue, or tonneau; or two hundred and fifteen francs the hectolitre. "Les premières cuvées" in such seasons bring seven or eight hundred francs, according to their grades of distinction; "les bonnes cuvées," from six to seven hundred; "les rondes," from four to five hundred; "les deuxièmes et troisièmes," from three hundred and fifty to four hundred. The most esteemed, "passe tous grains," from three hundred and fifty to four hundred, and above; the others not more than two hundred francs.

The Mont-Rachet brings twelve hundred francs; the

other white wines from three to six hundred; and the common sorts from fifty to seventy the queue.

It often happens in superior years, that the best wines, after making, do not bear a higher price than four hundred francs, and yet in fifteen months twelve or fifteen hundred are demanded for them. It may be easily judged, therefore, that no scale of prices, when the wines are perfect, can be permanent, owing to this circumstance. The following is a list of prices the Burgundy wines brought from the vineyards on the hills of Beaune, on an average of ten years; but it must be borne in mind, that the time of purchase was at the vintage immediately upon making, and paid by the highest bidder, and not when the wines had been kept. Volney, the queue, 460f.; Pomard, 450f.; Beaune, 440f.; Savigny, 420f.; Aloxe, 430f.; Aloxe, the Corton wine, 490f.; Chassagne, 410f.; Chassagne Morgeot, 470f. The product of Puligny, viz. Mont-Rachet, 1,000f.; Perrières and Clavoyon, 380f. Meursault wines, viz. Les Genévrières, la Goutte d'Or, 450f.; and Santenot red wine, 480f.; the common red wines sell for 90 or 100f.; and the white from 75 to 90f., including the cask.

The wines from the Nuits district are superior to those of Beaune for aroma, body, softness, raciness, and will bear transport to any distance. Le Prémaux, 500 francs; Nuits, 500f.; Nuits St. George's, 580f.; Vosnes, 530f.; the wines of Vosnes, viz. Richebourg, 600f.; la Tache, 600f.; Romanée St. Vivant, 700f.; Romanée Conti, six or seven francs a bottle. Vougeot, 530f.; Clos de Vougeot, five or six francs the bottle. The proprietors of the vineyards of Vougeot and Romanée Conti do not sell their wines in wood, nor, except in years of bad quality, do they ever sell them immediately, and then only by auction. They keep them in their cellars for years, and only at last dispose of them in bottles made on purpose, and bearing their own seals.

In the arrondissement of Dijon, the following were not long since the prices of two year old wines. It may be

judged from what has been already stated, that such a list can only be an approximation to the truth for consecutive years:—

White Wines.—Chambertin, 800 to 1,000 francs the queue; Gevray, 500 to 550; Chenôve Montrual, 350 to 400; Violettes, 310 to 350; Marsannay, 300 to 330; Perrières, 200 to 240. Red Wines.—Chambertin, 1,400 to 1,500 francs; Gevray, 700 to 800; Chambolle, 700 to 800; Chenôve, 400 to 450; Dijon, 300 to 400 francs. Marsannay, and other ordinary wines, 200 to 300; Fixin and Fixey, light wines, good ordinary, 150 to 250 francs, the casks included.

The wines of the Côte d'Or, most in repute, and of the best class, are those which in general develop their good qualities the slowest, when they have not been cellared for the purpose of rendering them portable too soon. Opinions are different upon the most eligible period to bottle them. Some think that they preserve their good qualities best when they are bottled at the end of fifteen months from the vat; but more think the third or fourth year a better time, when the proprietor can afford to delay it so long. The inferior sorts are delivered for consumption at the end of the second or third year, according to the quality. The fine wines are not commonly delivered until the month of March of the second year after the vintage. The good ordinary wines are bottled at the end of the first year, or they remain longer, if convenient to the consumer. The care bestowed upon the making, accelerates or retards the perfection of these wines. The longest duration of the finest wines most capable of keeping, does not exceed twelve or fifteen years from the season in which they are made. After that time, though they will support themselves some years, they decline instead of improve. From the second year in bottle, the fullest bodied and hardiest wines have attained their highest degree of perfection. All that can be desired after this period is, that they shall not deteriorate. The duration of the ordinary wines is not so

easily defined. They are rarely kept long in bottle, for after the second or third year they would become good for nothing. The produce of some of the wines of the Côte d'Or is nearly a thousand English gallons the acre.

The manner of making the best and most celebrated wines of the Côte d'Or is sufficiently coarse: the grapes are commonly trodden before they are thrown into the vat; a part of the stalks are then taken out, and the must is suffered to ferment. The gathering takes place in the hottest sunshine. The fermentation in the vat, which contains about eighteen hogsheads, and is usually left uncovered, lasts from thirty to forty-eight hours, if the weather is hot, and from three to eight days, and even twelve days, if it be cold, for the first class of wines. The white wines longer. The wine is then drawn off into vats containing each about seven hundred gallons. The management consists of a racking in the month of March following the vintage, and a second racking in September, repeated every six months, for the red wines. The casks are kept exactly filled, and the wine is fined. Many persons make the first racking soon after the first frost happens, fine immediately, and rack again in the month of March, and then in the month of September.

The second division of Burgundy, considered as respects the excellence of its wines, is the department of the Yonne. It contains, as has been already stated, more space devoted to the culture of the vine than the Côte d'Or; but though it produces some wines of very good quality, they are inferior to those of that renowned district.

The prices in the arrondissement of Auxerre are from forty francs the muid, to three hundred, and three hundred and fifty. These wines may be arranged in three classes. The first is made from the black *pineau* grape alone. It has a good colour, and agreeable bouquet, with strength and spirit, and yet does not injure the head or stomach. In this class may be placed the following wines, in their order of superiority:—Chainette; Migraine; Clairion;

Boivins; Quetard; Pied de Rat; Chapotte; Judas; Boussicat; Rosoir; Champeau; the Iles. These wines are produced on one hundred and thirty hectares of land. Hence may be judged the vast variety of species. They bring from three to four hundred francs the muid; the mean price is about three hundred and fifty francs.

In the communes of Irancy and Cravant, wine is produced called Palotte, worth about ninety francs the hectolitre, and much esteemed. This district produces red wines still lower in price.

The second class of wines is made from the plants called *tresseau*, *romain*, and *plant du Roi*, alone or mingled. Of this class the *tresseau* alone is the superior kind. The wine sells for thirty-six francs the hectolitre.

The third class is made from the plant *gamay*, or *gamet*, a common wine, strong coloured, but cold. It is remarkable that this wine, mingled with white wine, becomes sooner potable than in its natural state.

Of the white wines of the Yonne, the best class is produced from the *pineau blanc* alone. The chief of these is Chablis. If this wine is the product of a favourable year, it should be very white; it is a dry wine, diuretic, and its taste is flinty. The best wines of Chablis stand in the following order: first, Val Mur; secondly, Vauxdesir; thirdly, Grenouille; fourthly, Blanchot; fifthly, Mont-de-Milieu, forming together about fifty-five hectares of vineyards. These wines sell in the common run of the seasons at from two hundred and fifty to three hundred francs the muid.

The second class of white wines is produced from the white *pineau* grape and the species called *plant vert*. It is made at Chablis, and in other parts of the arrondissement. All these wines are called Chablis by the merchant, though of ever so inferior a quality. They are agreeable wines, nevertheless, and sell on the average of seasons for a hundred or a hundred and ten francs the muid.

The third class of white wines is the product of the *plant*

vert; grown in a bad aspect and soil, it brings about twenty-three francs the hectolitre.

The white wines of the first quality do not keep so well as the red. The first class of red wine is often kept in the wood for more than three years before bottling. It is excellent after it has remained a year in bottle, and will keep good for ten years more. The white wines are perfect at three or four years old, but are subject to get thick as they acquire age. In the wine districts of the Yonne the wines are racked twice the first year, and not again except just before they are sold. They are never fined except for bottling.

The vineyards of Avallon produce three distinct qualities of wine. The first delicate, fine, spirituous, and good, bringing fifty francs the hectolitre; secondly, a wine of ordinary quality, bringing forty francs; thirdly, common wines, worth very little. The best wines of Avillon are those from Rouvres, Annay, Monthéchérin, Monfaute, Clos de Vézeley, and Clos de Givry. Wines which form the ordinary wines of rich families are Vault, Valloux, Champgachot, Thurot, Girolles, and Etandes. These wines are treated very nearly the same as in Auxerre prior to bottling. The Champgachot is liable to a singular disease. In spite of racking, and all the care taken, it is sometimes loaded in spring with a cloudiness which changes its taste and hue. In this state they are careful not to disturb it, and it soon works itself clear and of a good colour. It is rarely better than after this sickness, which never happens but once. Some of the growers are pleased to see the wine put on the appearance.

The best wines of the arrondissement of Joigny do not fetch more than forty francs the hectolitre. In the arrondissement of Sens there are wines that bring about sixty, such as that of Paron, but the quantity is small.

The arrondissement of Tonnerre merits attention for its wines. The vines are generally planted on calcareous

slopes of different aspects. Those of the south-east and south are very good. Such as bear a south-west aspect are also much esteemed, and give the best wine. Of this latter aspect is the vine ground from Tronchoy to Epineuil inclusively, where the most distinguished wines are grown, such as those of Préaux, Perrières, des Poches, and others, particularly Olivotte, in the commune of Dannemoine.

The wines of Tonnerre of the finest kind fetch ninety francs the hectolitre on an average; and the other kinds in gradation from sixty to thirty-five. The wine of Olivotte, one of the best, has good flavour, is fine, and of excellent colour, but it lacks the true bouquet, unless in very favourable years. The communes which furnish the best wines are Tonnerre, Epineuil, Dannemoine, for the finer red wines; those of the second and third qualities are grown at Molosme, St. Martin, Neuvy, and Vezinnes. White wines are grown in the communes of Tronchoy, Fley, Béru, Viviers, Tissey, Roffey, Serigny, and Vezannes. Those of Grize, in the commune of Epineuil, as well as that of Tonnerre, and, above all, of Vaumorillon, in the commune of Junay, are distinguished. These wines are treated in making as in the Côte d'Or, and will keep good in bottle from five to ten years.

The department of the Saone et Loire is the other division of ancient Burgundy. The quality of its wines is by no means equal to those of the Côte d'Or or the Yonne, and they are therefore the Burgundies of the less opulent classes.

These wines differ in prices: the arrondissement of Mâcon furnishes red wines, for example, to the extent of 4349 hectolitres, at sixty francs the hectolitre, and 219,982 hectolitres of varying quality at intermediate prices down to fifteen. There are excellent wines in quality between those of Burgundy and the Rhone, which at six or seven years old are in their prime age. They drink with water better than any other wines. Lyons is a great consumer of these wines. The wines of the commune of Roma-

neche, called Les Theoreins, sell for fifty-six francs; la Chapelle de Guinchay, Davayé, Creuze Noire, St. Amour, at different prices, down as low as twenty-five francs. The white wines of the first class, such as Pouilly, are of superior quality, and better adapted for carriage than the red, but the quantity made is much less. They sell at fifty-six francs; Fuissé at forty-seven; Solutré, Chaintré, Loché, Vinzelles, Vergisson, Salornay, Charnay, Pierre-clos, still lower.

The annual value of the wine does not increase in consequence of the goodness of the quality. The wines of Burgundy are generally dearest in years when their quality is indifferent. This has given rise to the proverb among the wine growers, *vin vert, vin cher*—"tart wine, dear wine." The reason of this is, that the good quality of the wine always accompanies abundant years, and the reverse. The cultivation of the vine in these districts has much improved of late years. The quantity of fruit produced is also more considerable. The system in the Mâconnais is for the most part a division of the produce between proprietor and cultivator. The Vignerons here are a sober, economic, respectable class of men. The hectare of vines represents a capital of 5,000 or 6,000 francs. Not less than 40 or 50,000 hectolitres might be sent out of the district, were wine demanded to that extent.

Of other red wines the little canton, named Moulin-à-vent produces a light and delicate species; but it must be drank in the second or third year. It will not keep beyond the tenth. The wine of Davayé ameliorates best by age. It may be drank in the second year, and will keep till the twentieth. It approaches nearest the wines of the Côte d'Or in excellence, though considered but an ordinary wine. When it is kept some time it rises superior to the class denominated ordinary, in the common sense of the word. The white wines of Pouilly rank superior to any of the red wines of the Mâconnais. In good

years they rival the first products of the French soil, and compete with the best wines of Champagne, Burgundy, or the Bordelais, according to the inhabitants of the Mâconnais. Their characteristic is the nutty taste they leave on the palate. At one year old they drink smooth and agreeable, after which they much resemble dry Madeira, both in colour and strength. They will keep a long time. The wine of Fuissé does not taste of the nut like Pouilly, but has a flinty flavour, is fine and delicate. It becomes more spirituous by age. The wines of Solutré are more like those of Pouilly than Fuissé, but are inferior. These and the other white wines enumerated before, are often sparkling or *mousseux*, of their own accord, in the first, and sometimes the second year, when bottled in March. They keep long and well.

The red wines keep a good while in wood, but the white are bottled in the month of March of the first year. They are twice racked, and fined only six days before bottling.

In Autun there are three qualities of wine. The best is called Maranges; it is left in wood three years, bottled the fourth, and keeps well. Its mean price is seventy-six francs. The second quality of wine is that of Sangeot, and, indeed, all the wines of Dezize, except Maranges. These are ordinary wines, and bottled at three years of age, will keep twenty. They increase in quality by age, and become from *vins d'ordinaire* to be *vins d'entremets*. The mean price is thirty-five francs the hectolitre. The wines of Châlons admit of the same divisions in quality as those of Autun. The best wines are from the *noirien* grape, and the best of the first growths fetch sixty-six francs, and of the second growths forty-four francs. These wines have a fine and delicate taste, they please by their agreeable odour and aroma. In the ordinary wines the aroma is not present; still they are pleasant drinking of their class. The better ordinary wines of Châlons increase in value by age, augmenting a fourth in

price every year they are kept. A bottle of the finest wine fetches from two to three francs. In the arrondissements, the produce of which is not here detailed, the mean price of the hectolitre is from twenty to twenty-four francs.

Such are these wines, the most perfect ever grown, and yet the care taken of them by the maker, from the press to the bottle, is by no means equal to that taken of Champagne. Nature and the site, with the observance of a very simple and common process, are all that are demanded to bring to its present perfection the first red wine in the world. The secret of the excellence of Burgundy depends upon unknown qualities in the soil, which are developed only in particular places, often in the same vineyard, at all events within a very narrow district. Whatever be the cause, France has in these wines a just cause of boast, and a staple in which she will never be excelled. While much is owing to the climate and aspect, it is evident that the peculiar characteristics of Burgundy depend least upon the art or labour of man, since wines inferior in quality receive as much or more of his attention than those of Burgundy.

There is very little of the first class of these wines exported from France, in this respect differing from Champagne, where the best finds its way into foreign countries. There are several reasons for this, and among the foremost, the small quantity produced, which the French, who are choice in wines, know very well how to distinguish, but which foreign merchants very rarely do. As good a price can be obtained in France for the highest class of Burgundy, such as Romanée Conti, of which only a dozen pieces are annually made, or for la Tache, as can be obtained any where. The first of these wines, being grown upon less than four acres of land, is not beyond the supply of the Paris market; and to the second, grown upon a spot of ground about six acres, the same remark will apply. The genuine Chambertin is a scarce wine with the foreigner. The other wines of the first class of Bur-

gundy are therefore substituted for these to the stranger almost universally. This is, however, of less consequence, when it is considered that very few persons, except those of the best taste habitually acquainted with them, can discover the difference. In wholesomeness, and every essential quality to the ordinary drinker, they are equal to the very first growths.

To recapitulate the wines of the Côte d'Or: the finest Burgundies of the Côte de Nuits, are, Romanée-Conti, la Tache, Chambertin, Romanée St. Vivant, Richebourg, Nuits, St. George's, Clos Vougeot, Prémaux, Vosnes, and la Perière. Of the second class, or Côte de Beaune, Chambolle, Musigny, Volnay, Pomard, Beaune, Savigny, Aloxe, Aloxe de Cortin. The Côte de Chassagne, Vosnes, Morey, Santenot, St. Aubin, Marange. These are the three first and finest qualities among red wines. Of white, the celebrated Mont Rachet takes the first place, then the Goutte d'Or and Genevrières, of Meursault. The red wines of the second class above are many of them little inferior to the first.

The first class of the wines of the Yonne comprises those called des Olivottes, near Tonnerre, and Perrière. Those of Auxerre have been enumerated in a preceding page, to which, in the second class, may be annexed the wines of Epineuil, les Poches, Haute Perrière, Irancy, Dannemoine, and Coulanges la Vineuse. The white wines of the first class are Chablis, Tonnerre, le Clos, and Vauxdesir.

The first class of Burgundies in the Saone and Loire, are Moulin à Vent, Torins, and Chenas. The second class comprise Fleury, Chapelle des Bois, and, in short, all the district of Romanèche. The white wines are Pouilly, Fuissé, of the first class, and Cheintré, Solutré, and Davayè of the second.

WINES OF THE RHONE, &c.

The wines of the south of France generally may be taken, without confusing the reader, in the order in which they happen to offer themselves. Some of them rank before any other wines of that country in the estimation of excellent judges.

The department of the Drôme was part of ancient Dauphine under the old division of France. Its vineyards cover 28,212 hectares. The vineyards of Valence are the most important for the excellence of their wines; but those of Montélimart are two thousand hectares more in extent, and their produce is somewhat greater, being 219,024 hectolitres; those of Valence producing only 210,000. The arrondissements of Die and Nyons are also noted for wines, but they do not come up to those of Valence in character. The total value of the vinous product of this department is estimated at 9,918,152 francs, and averages about eighteen hectolitres per hectare. Of these wines above a hundred thousand hectolitres of the choicest are exported to the north and to Bordeaux. The wines of Tain are almost exclusively bought up for that city.

Of wine grown in Valence, both white and red, the quantity is about 2,700 hectolitres, averaging one hundred and sixty-six francs; of Crose, red and white, 4,230 hectolitres, at one hundred and twenty-eight; Chanos-Curson 3,384, at fifty-two; Mercurol 5,238, at seventy-eight; Brézème 126 hectolitres only, at one hundred and forty-three. The other varieties, about 195,000 hectolitres, average only from twenty-eight to fifteen francs.

A hill near the town of Tain, in the arrondissement of Valence, situated on the left bank of the Rhone, with a southern aspect, produces the celebrated Hermitage. It is grown upon slopes; the principal elevation, of no great height, is called Bessas. It is part of a chain of granitic mountains which extend from St. Vallier to Tain. On the

summit of Bessas may yet be seen the ruins of the retreat of the hermits, of whom the last died above a hundred years ago. Portions of the granite seem to be in a state of decomposition. This granite is crossed by veins of a gravelly texture, by one of a calcareous character, and by some of pure sand.

Tradition says, that an inhabitant of the town of Condrieu determined to turn hermit, and established his cell on an uncultivated hill near Tain. He amused his leisure hours by breaking the stones and rocks to pieces which surrounded his dwelling, and planting among them some vine slips from Condrieu: they succeeded to admiration. His example was copied by others, and the sterile hill side was soon converted into a vineyard. The good taste of the monks in wine has been already remarked in other places. Thus to the hypocrisy of the mortifiers of the flesh do we here owe some of the choicest delicacies of the taste.

Hermitage wine is divided into five classes. It is styled by the French the richest coloured in their great variety of wines, but it differs much with the seasons as to quality. Red hermitage will not keep more than twenty years without altering. The price of the first class is often as high as five hundred and fifty francs the piece of two hundred and ten litres. The other growths or classes sell from four hundred and fifty down to three hundred, and even as low as two hundred and fifty francs the piece. When the season is bad, and the wine of moderate quality, the wine of the first growth will not bring more than two hundred and fifty, and of the last, one hundred and twenty francs. All these are only to be considered the prices when new at the vintage, and approximating to the mean prices in the relative cases.

Red Hermitage, of the first class, is not bottled for exportation until it has been four or five years in the cask, in which, as well as in bottles, it is generally sold at that age. The price in the former case is high, even if the quality be moderate. In bottle the best sells for about four francs.

The price of this wine is regulated by the quality, together with the demand for exportation, and not by the quantity or scarcity. The quantity produced is only about 2369 hectolitres, or 63,000 gallons, including every quality. Parts of the vineyards have brought as much as 70,000 francs per hectare. It is fermented in large vats; the fermentation lasts about five days; but its treatment is not so perfect on the whole as that of some other French wines. Brande says the red contains 12·32 of alcohol, and the white 17·43. Inferior classes of wine from this district are exported from the department to give strength to wines in other parts of France. The produce is about twelve casks per hectare, or 220 English gallons.

The white Hermitage is made of white grapes only, and divided into three growths. This is the finest white wine France produces. Its colour should be straw-yellow; its odour is like that of no other known wine. It is of a rich taste, between that of the dry and luscious wines. It is often in a state of fermentation for two years, but is never delivered to the consumer, if it can be avoided, until fermentation is complete. The quantity of real white Hermitage does not exceed a hundred and twenty pieces annually. It keeps much longer than the red, even to the extent of a century, without the least deterioration, though after twenty-five or thirty years old it assumes somewhat of the character of certain of the old Spanish wines, and its perfume and taste undergo a change.

Ermitage-paille, or straw Hermitage, is made from white grapes carefully selected out of the most perfect and best. These are dried on straw for six weeks or two months, and then submitted to the press. But little is made, and that carries a very high price; for to obtain it in perfection, a season which brings the fruit to exact maturity is required, dry without cold, during the time the grapes are exposed on the straw. Ermitage-paille is a rich, luscious sweet wine.

Red Hermitage is produced from two varieties of plants

named the little and great *Scyras*. The vines are about thirty inches from each other. A tradition is current that this grape was brought from Schiraz, in Persia, by one of the hermits of Bessas. White Hermitage is produced almost wholly from the greater and lesser *Rousanne* grape.

The red wine of Crose is of the same character as Hermitage. The third growth of Hermitage and the first of Crose rank together. It is a finer wine and not quite so full. About 3,995 hectolitres are made, some of which is often exported as Hermitage. The white Crose is a light, delicate wine, with little vinous body. It sparkles like Champagne, and hence, perhaps, is called *Cotillon* by merchants, a name given by them only to effervescing wines having fineness and sweetness, such as Crose and white Mercurol. These wines bring from two hundred to two hundred and fifty francs the piece of two hundred and ten litres. In commerce they sell from two francs to two francs and a half the bottle. They will keep about fifteen years, but become dry wines in four, losing their effervescence entirely. They do not approach Champagne; they want its perfume and vinosity.

Chanos-Curson is another effervescing white wine of this district. It is weaker in body than the Crose, but is exported to Flanders and the north. It will not keep more than four or five years. It brings from a hundred to a hundred and twenty francs the piece.

Mercurol is a red wine of the same nature, but lighter than Hermitage. Its perfume is agreeable; it is fine, vinous, and well bodied. Gervans-rouge, Roche-rouge (the latter earthy in taste), and Thassis, are all red wines, rarely sent out of the district. They are grown on a stony soil in general, and bring from fifty to ninety francs the piece.

The other wines, red or white, are worth only from fifteen to twenty francs the hectolitre, the wine called Brézème excepted, which in most respects may rank with

the third class of Hermitage; very little is exported because it is scarcely known. It is however beginning to be sought after. In the most productive year only about sixty pieces, of three hundred francs in value, have been made. The vineyard of Brézème is on a hill belonging to the commune of, and near Loriol; it is only one league from the left bank of the Rhone, three quarters from the Drôme, and seven leagues from the Hermitage, with the exposition and soil of which it carries a perfect analogy. In some instances it has brought four hundred and fifty francs the piece.

The arrondissement of Die furnishes only common wines. The best are grown at Saillans and on the hills of Crest and Die, and are tolerable white wines. The best known is the Clairette de Die, a very agreeable effervescing wine. In price these wines vary from ten to thirty and forty francs the hectolitre.

Nyons and Montélimart furnish ordinary wines from twelve to twenty, or thirty francs the hectolitre; the better price is that of years of scarcity. In the arrondissement of Montélimart, nevertheless, there is a vineyard worthy of notice. It is in the commune of Rochegude, and the wine produced there, called Tinto, sells for a hundred francs the hectolitre.

The department of the Rhone, formerly the Lyonais and Beaujolais, is noted for good wines. The quantity produced, of all kinds, amounts to 458,000 hectolitres. The land in vineyard is 18,126 hectares, divided between the arrondissements of Lyons and Ville Franche. The vines here give 25·26⅔ hectolitres per hectare, and are valued at 10,366,400 francs. Of these wines all, except 68,000 hectolitres, are consumed in the department. The portion unconsumed there is partly sent to Paris, or to Bordeaux for exportation abroad, either pure or mixed with the wines of that neighbourhood.

The wines made in the arrondissement of Lyons are

small in quantity, either red or white, which can be arranged among wines of the first order. The most noted is Côte Rôtie. This red wine is grown near Ampuis, on the south side of a hill, and ranks as one of the first in France. The quantity produced of the very best quality is small, rarely exceeding two hundred and fifty hectolitres. Wine of the second quality is often passed off for the first upon the buyer. Côte Rôtie is remarkable for the excellence of its colour, for clearness, strength, and perfume; at the nose it has the sweet odour of the violet. It is very slightly bitter; when not aged, it is a little heady, and is much improved by a voyage. It is saleable at prices from eighty-three to one hundred and eight francs the hectolitre, according to the season. Its alcohol is about 12·32 per cent.

The wines called Gallée, Barolles, and St. Foy, enjoy a considerable local reputation, and fetch from thirty-five to forty-five francs the hectolitre at Lyons. The wines of Chassagny are of good colour, spirituous, improve by age, and sell for thirty-five francs. About fifty thousand hectolitres of superior quality are grown in the arrondissement of Lyons.

Most of the red wines in this district are the produce of the plant called *sérine*.

The best white wines are those of Condrieu, grown at St. Colombe, about eight leagues south of Lyons. These wines are of a luscious taste, and have a smell and aroma remarkably agreeable. They keep a long while, and become of an amber colour by age. The same kind of wine is made in the neighbouring vineyards, but all are inferior to that made at Condrieu, though they are sold under the name. The first quality of this wine brings from fifty to a hundred francs the hectolitre. It is eagerly bought up by the merchants, both of Lyons and Paris, as soon as the vintage is over. This wine is made from the plant called *vionnier*.

The red wines of Côte Rotie are kept in wood for three

or four years. Those of Gallée, Barolles, and St. Foy, five or six. They preserve well in bottle for thirty. While in the wood they are racked once a year.

In the arrondissement of Ville Franche, the most esteemed growths are those of Chesnas, in extent about eighty-five hectares; Fleurie, one hundred and fifty; Brouilly, thirty-two; Julliénas, one hundred and forty-five; St. Etienne, seventy-two. The second growths are those of Chassagny and Bassieux. The first of these wines are delicate, and of tolerable quality; they will keep only about five years in wood, and eight or ten in bottle; while those of the second growths, it is singular enough, are not potable until they are aged, and will keep well twenty or thirty years.

There are other intermediate wines distinguished in the department, such as Adénas, St. Léger, Blaie, St. Julien. The former wines improve on being sent north, and deteriorate on approaching the south. Their mean price is two hundred francs the botte of four hundred and twenty litres. They are racked twice a year while in wood, and fined just before bottling.

In the department of Isère there is some tolerable vine ground. The Isère is part of ancient Dauphine. Its produce amounts to 368,861 hectolitres, at $34{\cdot}58\frac{3}{5}$ per hectare. The value is about 6,106,079 francs. The best wines are grown near Vienne, but they are of very moderate quality. Two years in wood and four in bottle is all the time they will keep good. There is great neglect shown in the treatment of the vines.

In the arrondissement of Grenoble, there is one hilly spot of thirty hectares, named Mas-des-côtes Plaines; it is in the commune of Jarrie. This wine is tolerable after being kept three or four years in bottle; and would be excellent were not the vines much neglected. In the arrondissement of St. Marcellin there is a wine which brings about eighteen francs the hectolitre. There are no white wines with the least reputation in that arrondisse-

ment. The white wines sold at a distance, as coming from Vienne, are those of St. Pérai and Condrieu, while the red wines, which pass as wines of Vienne, are grown on the right bank of the Rhone, in the department of that name, at Côte Rôtie, Ampuis, or Cumel. The wines of Reventin are of very ordinary growth; those of Scyssuel are a little better. The fact is, the wines in the country round Vienne, in all directions, may be reckoned together in one class as to quality.

Vaucluse, formerly the Venaissin, in the principality of Orange, has 22,038 hectares in vineyards, and the produce is 362,208 hectolitres, or sixteen per hectare. These are valued at 6,519,744 francs, of which the arrondissement of Orange produces the largest quantity. About 29,000 hectolitres are exported, and 13,000 are distilled. The wine of Châteauneuf is that which is best known out of France of these wines; indeed, it is almost the only growth which is exported, except to the home provinces. Its produce is about 1,200 hogsheads, of 90 veltes each.

In the arrondissements of Avignon and Carpentras, there are wines of two qualities, namely, of Garigues and the hills, and of the plains or deep bottoms. The former have considerable spirit, little colour, and will keep a great while. The latter will not keep so long, having less body, and are in general obliged to be sold annually before the hot weather sets in.

The best wines are those of Garigues d'Avignon, of Sorgues, of the mountains of Morières, of Gadagnes, of St. Julien, and the white wines, called *clairettes*, of Caumont.

At Mazan, in the district of Carpentras, there are three places where a particular species of wine is made, called *vin de Grenache*. The *Grenache* grape is bruised, and the must being pressed out, it is boiled for the space of an hour. It is then poured into barrels, and one-sixteenth of brandy is added. After it has been well fined, it is sold to the merchants, mostly for consumption in Paris.

The wine of Châteauneuf du Pape, and that of Nerte, both in the arrondissement of Orange, are good wines. They are kept two years in wood, and will keep in bottle a very long time. The price of the wine of Châteauneuf varies from thirty-two to forty francs the hectolitre. The wine of Nerte at two years old, when first bottled, is invariably a franc the bottle. The quantity produced is about fifty hogsheads, of ninety veltes each. About eighteen francs may be the mean price of the wines of the department. Of these wines, the best next to those already mentioned are the growths of the Garigues of Orange, such as Bruxelles and Peyre-blanche. They are light, clear, and tolerable drinking. The wines of Serignan are of this class. The wines of Claux Cavalier and the flat country, are meagre, and soon turn bad. They are consumed by the peasantry.

The department of Gard, part of ancient Languedoc, has 51,198 hectares of vines. The average produce is 1,141,651 hectolitres, at 20·34⅘ per hectare, and is in value 10,949,833 francs. About 308,000 hectolitres are distilled.

The wines of Nismes are in repute in Paris, particularly the St. Gilles and Costière. Upwards of 60,000 hectolitres of wines from Uzès are sent into Burgundy, to mingle with the wines designed for exportation. The vineyard of Lédenon, of about 320 hectares, near Nismes, is the most distinguished; and among these, one in particular, of about 180 hectares, called the Plaine de Paza. The price of the wine is forty-five francs. This wine has a very agreeable bouquet, and is served pure at tables of the first rank in France. The wine of St. Gilles, called *vin de remède* among the merchants, is the best. It is so called, because it is used to strengthen and colour the weaker kinds. The average price of the St. Gilles wine is only about fifteen francs, and the produce 15,000 hogsheads.

These wines, when not sold on the spot the first year, are kept in wood three, and racked in the month of March the first season, when a particular management is required.

They deteriorate after the sixth year in bottle. There is a white wine made at Nismes, said to be tolerably good, called Blanquette de Calvisson. The wines of Uzès, grown on the hills bordering the Rhone, are among the most distinguished in the department. The first in quality are those of Chusclan, Tavel, St. Laurent des Arbres; and the best cellars are those of Codolet. The next wines in order are those of Roquemaure, St. Geniès, Cornolas, Virac, Orsan, Laudun, and St. Victor de la Côte. The surface on which these wines are grown is a hilly side of the Rhone, seven leagues long by two wide.

The mean price of the wines of the first quality is from eighty to a hundred francs the piece, or from twenty-eight to thirty-five francs the hectolitre. The inferior wines grown here are either distilled or drank on the spot.

The first and second qualities of the foregoing wines are vinous, delicate, and fine. Those made where the Grenache and Alicant grape predominate, are remarkable for their bouquet and flavour, and are reckoned to be as agreeable to the stomach as they are to the taste. They are considered among the best southern wines; and are of a light crimson colour. There is a good vineyard of this kind of wine on the domains of Sauvage, St. Laurent des Arbres, which is called "wine of Hannibal's camp."

If not carefully kept, these wines are apt to get paler after eight or ten years of age.

The white wines of Laudun are much sought after by the merchants: their qualities are dryness, vinosity, and an agreeable taste.

The red wines are kept in wood two or three years, and the white six months. The red are racked once a year, in March. The white undergo this operation three times in six months.

The prices of these wines augment twelve or fifteen francs the first year on each piece, and from twenty to twenty-five the second or third, after which age they are

rarely sold. This district produces commonly from fifty to sixty thousand hectolitres annually.

Besides the foregoing wines in this department, some common kinds are made at Méjannes and Bouzac, which are red. At St. Ambroix there is a sparkling white wine manufactured, which bears good repute. The process of making this wine is singular. After gathering the grapes, they are trodden, and the must left to ferment for thirty-six or forty-eight hours. It is then racked, filtered with brown paper, bottled, and tied with packthread.

In this part of France it is the custom to leave the white wine in the vat with the murk for twenty-four hours, and then to rack off the must for fermentation in the wood.

At St. Hippolyte, there is a common wine made of an agreeable taste, and fine bouquet, but it will not keep. A little very capital wine is made in Alais by the growers for themselves, or for presents to their friends, but it is never sold. The grapes are picked, and the spoiled ones put into a vat separate, and great care is taken in the manufacture.

The department of Haute Garonne, also a part of Languedoc formerly, has a climate which would be thought excellent for the vine, but yet no good wine is made. This may be attributed more to the badness of management, and the ill choice of the plants, than to the soil.

The department of Ardèche, formerly Viverais, grows 14,929 hectares of vines. The total produce is 224,322 hectolitres, or $15{\cdot}02\frac{5}{7}$ per hectare. The value is 3,816,190 francs. These are grown in three arrondissements, Argentière, Privas, and Tournon. The wines of Argentière are transported on the backs of mules into the neighbouring departments: those of Tournon are in high estimation, even out of France.

The wines made in two of these arrondissements will not keep more than two years in wood, and two or three in bottle. Tournon alone produces the good wines of the

department. First, the dry white wine of St. Pérai, spirituous, delicate, and of an agreeable perfume. St. Pérai is of three degrees of quality. The first brings sixty francs the hectolitre; the second fifty-six; and the third forty-five. The produce is about seven hundred hectolitres. They are delicate wines, of deserved reputation.

The red wine of Cornas ranks, perhaps, with the second quality of Hermitage. There are two degrees of these as to quality. The first sells at sixty, and the second at fifty francs the hectolitre. About nine hundred hectolitres are made.

Next comes the St. Joseph, of the same quality as the Cornas, but held more in estimation. There are two kinds; the first fetches seventy-five francs. Only a hundred and twenty-six hectolitres are made.

There are six thousand hectolitres made of a wine called Mauves, of two qualities, selling at from twenty-five to thirty-five francs. It is of very good ordinary quality.

The red wines Glun, Châteaubourg, Soyons, Tournon, St. Jean de Musois, Vion, and others, are Rhone flavoured wines, a little above the second quality of Mauves, and bring twenty-three francs the hectolitre, of which 15,643 are made.

The better wines of Tournon augment in value with their age, though not often to be met with for sale when old. The best will keep three or four years in wood, and fifteen or twenty in bottle.

At Argentière a sparkling, or *mousseux* white wine, is made by the following process:—A quantity of white grapes are selected, and exposed on planks to the sun, if possible, for four or five days. They are then plucked from the stems, and put into a vat, where they are bruised with the hands or feet. They are then left for twenty-four or thirty hours, to give time to the skins to rise and separate the murk from the fluid parts. The wine is then racked into large bottles, which are decanted every two days until the sensible fermentation is terminated. The

wine being then clear is put into very strong bottles, which on the following day are corked, tied, and sealed.

In the department of Tarn, part of ancient Languedoc, 20,631 hectares of vines are grown, producing 433,297 hectolitres, or 21·00⅓ per hectare, valued at 5,411,160 francs. The wines of Albi are distinguished by those of the hill and plain. The former may be called a tenth more valuable in the market than the latter. These wines are light, are kept three or four years in wood, and will then be good bottled for fifteen more: though only twelve francs the hectolitre at the vintage, they fetch eighty or a hundred when of mature age. The best are grown at Caizaguet, St. Juéry, and Cunac. The best wines of the department are those of Gaillac. The best quality of the red will bear transportation to any distance. The price is twenty-five francs the hectolitre for the first quality of the red of Gaillac, and for the second quality thirteen. The mean price of the best white per hectolitre is thirty francs, and the second quality twelve.

To mature the red wines of Gaillac, six or eight years in wood are required, and ten or twelve in bottle, in which latter state they are rarely sold. These wines will keep good for eighty or a hundred years. It is not advantageous to buy the wines mature in wood from the hands of the grower, unless some stipulated agreement is made beforehand. As before observed, in respect to other wines, the price the second year in wood is equal to or above the half of the mean vintage cost additional.

The department of the Tarn and Garonne, part of ancient Languedoc and Quercy, has 23,168 hectares of land in vines. The quantity of wine is calculated at 264,360 hectolitres, or 11·40½ per hectare, valued at 3,035,700 francs.

Besides the common tart sorts of wine made in this department, of the class called by the French *vinades*, or *piquettes*, reckoned very good of the kind in quality, 196,000 hectolitres of ordinary quality are made, and a large quan-

tity is sent to Bordeaux, to mingle with other wines of less body and colour.

At Montauban, the wines are distinguished into those of the hills, the plain, and the *cances*, *vins de cances*, or *vignettes*. These last are the product of alleys of vines, isolated on ground cultivated in husbandry, most commonly on two lines of approach, and named from that circumstance cances, or vignettes. As these cances draw their nourishment from land which is dressed for the produce of husbandry, the wine is of very bad quality, and in the best years does not bear a price above half that of other kinds differently cultivated. Nothing can be more injudicious than such a mode of growing the vine, and yet custom is paramount over reason, even when its bad effects are so obvious. The price of the best wines is from twenty-five to thirty francs. The hill wines here do not equal those of the plain; the latter having more body and colour, though they are less delicate than the former; their highest price is from twenty to twenty-five francs the hectolitre. In abundant years these wines sometimes fall as low as five francs. The difference between new and old wine is fifty per cent. The hill wines are bottled at two years old, and those of the plain the third or fourth year. The latter will keep thirty or forty years. The hills of Fran and Beausoleil, and the plains of Villedieu, Montbartier, and Campsas, are the most distinguished red growths of Montauban. The best white kinds are those of Aveyron and Tarn, particularly those called Aussac.

The best wines at Moissac are those of Viarose, the Magdeleine, and Boudon. Those from Pardigues, Villedieu, Campsas, Fabas, and the higher part of Castel Sarrasin. These wines are hill wines. The secondary growths are from the plains and cances, which here, planted in double rows, mark the limits of the fields. The first of the hill growths have colour, strength, and a slight taste of the raspberry, and will keep a long while. Their mean price is eighteen or twenty francs. Those of the second quality

sell for ten only. There are two qualities of white wine here, one ordinary, and the other only fit for the distillery.

In the department of Aude, also part of Languedoc, there are 36,064 hectares of vines, producing 601,775 hectolitres, at 16·68⅔ per hectare, and valued at 6,326,136 francs. All the wine produced here is consumed in France.

The wine of Castelnaudary is consumed in the arrondissement of that name: a sour bad coloured wine, only about ten francs the hectolitre in price. The wines of Carcassone are nearly all used in the distillery. The wines of Narbonne are used for the same purpose. Being hot and high coloured, they are sometimes taken at table when aged; their prices vary from ten to thirty francs. The prime wines of the department are those of Limoux, which many persons prefer either to Bordeaux or Burgundy, as ordinary wines. They are of the most agreeable taste, and tolerable in quality, but will not keep. They bring, on the average, fourteen francs the hectolitre.

In the canton of Limoux, the wine called Blanquette de Limoux is made from the *blanquette* grape. The fruit is transported from the vine to the house of the grower, where it is left four or five days upon boards, that the saccharine principle may have time to reach a perfect state. Women are employed to pick out the unripe, or rotten fruit. The grapes are then gathered from the stems, trodden, and the must passed through a sieve, after which it is placed in barrels holding a hundred or a hundred and twenty litres. Five or six days afterwards, the wine is cleared, by passing it through filters of cloth, of a fine texture, and then back into the same barrels, which are previously well cleansed. The bung-hole is slightly closed, care being taken not to close it securely until there is no longer any sensible fermentation, or for a term of five or six days generally after the barrelling. The wine is bottled at the full moon in the March following. This

wine sparkles and effervesces, and, according to local partiality, well nigh equals Champagne, though few strangers would be inclined to confirm such a judgment.

The department of Herault, a part of Languedoc, has 91,941 hectares of vines, producing 1,713,600 hectolitres, or 18·63⅓ per hectare, and valued at 17,797,407 francs. Cette is the principal port for exportation.

Montpellier produces the wine called St. George d'Orgues, much of which is exported to the North. It is a good wine. An arpent of thirty ares in a dry soil, such as St. George, St. Drézeri, Longlade, and others, gives a hogshead of forty francs value in wine. But an arpent of good corn land will produce five hogsheads, at forty-five francs, or two hundred and twenty-five francs. Montpellier and Cette are the ports of exportation, and from this department a great deal of wine is exported to Italy, Genoa, and the north These wines are commonly called in the trade, wines *de cargaison.* The wine of St. George d'Orgues has bouquet, lively colour, and spirit. Its price is one hundred and sixty-five francs the muid of seven hectolitres, cask included, or twenty-three francs and a half per hectolitre. The vineyard of St. George's is 510 hectares, and the produce about 3,690 hectolitres. The favourite growths are called Serres, Poujols, Cabrides, and those of the road of Celleneuve.

There is a second class of wines, called wines of St. Drézeri and St. Christol; where they fetch nineteen or twenty francs the hectolitre. A third class exists, noted only for spirit, want of fineness, and flinty taste, though in the latter quality equalled by the second class, selling at twelve francs the hectolitre. A fourth class is called Chaudiére wines, from their large proportion of alcohol. Wines to imitate Port, Sherry, Madeira, and Figueras, are made in the Herault and vicinity. They are successful imitations, highly brandied, of the hot wines drunk in England; and being cheaper, are exported thither by way of Cette, well repaying the experiment, as genuine Oporto.

There are here two white wines, the clairette and picardan, so called from the plants which produce them. They are dry, or sweet, according to the soil. The sweet fetch twenty-five francs, the dry seventeen.

The muscadine wines of this department are divided into two qualities. The first comprehends those of Frontignac and of Lunel. These are luscious, fine, spirituous, and sweet. Their mean price is fifty-four francs and a half. There are 490 hectares of vine ground of Frontignac, and only ninety of Lunel, which give, on an average, 4,060 hectolitres, or only seven per hectare. The vine ground of Montbazin, which affords muscadine wine of the second quality, is little more productive, yielding 1,600 hectolitres from 160 hectares. The mean price is thirty-seven francs.

The red wines remain three years in wood, are annually racked, and will keep five or six in bottle. The dry white wines will keep from ten to twenty years; the sweet five or six, after being three or four in wood.

The muscadine wines, after being two years in wood, will keep twenty or twenty-five in bottle: when old, they resemble Malaga. Their price does not augment by age more than from twenty to twenty-five francs. There is a red Frontignac, carrying a very high price; only ten or fifteen hogsheads of which are made.

At Beziers there is a red wine named wine of Alicant, produced from a grape so called. The price is eleven or twelve francs, and it is bought up by the merchants of Cette for mingling with other kinds.

Muscatel, or muscadine wine, is grown to the extent of twenty thousand hectolitres at Beziers; the best near Maraussan. It sells for forty-four francs, and is reckoned next after Frontignac and Lunel. There are several other wines, but of a common kind, produced in the same department.

The department of the Var, part of ancient Provence, is supposed to give about 693,448 hectolitres of wine. From

the mode of planting the vines intermingled with olives, and the distance of the plants from each other, no accurate estimate can be made. These wines are thought little of in France; but some of them, from their low prices, are exported to places in the Mediterranean. At Malgue the wine of that name is strong, has an agreeable bouquet, and good taste, and forms an exception to the foregoing remark. Second to this wine is that of Rivesaltes (not that so celebrated, which is made only in the Pyrénées Orientales); very little of either of these kinds is grown. The climate favours the vine, but the cultivators are grossly negligent.

The name of wines of the Gaude is given to those which are the produce of Cagnes and St. Laurent du Var. They are hardy, and will keep long. There is a wine at Antibes which is considered delicate, and agreeable to the palate, but it ranks only as an ordinary wine, and sells for forty or fifty francs when long kept in bottle.

The department of the Pyrénées Orientales, formerly called Roussillon, has 29,913 hectares of vines, giving 343,963 hectolitres of wine, or 11·50 per hectare, valued at 7,164,612 francs, the principal part of which is produced in the arrondissements of Perpignan and Céret. A great quantity is exported from the neighbourhood. Much goes into Spain, which borders upon the department. Paris, Italy, Denmark, and Prussia, also take these wines. The merchants buy the muscadines of Rivesaltes, a town about four miles from Perpignan, and nearly all the white wines, either to export pure, or to mix with others.

The quantity of Rivesaltes muscadine made is about sixty-five hogsheads per annum. When sold it bears a very high price. The soil is dry and granitic, and appears as if it were incapable of supporting any vegetation.

The vines most cultivated at Rivesaltes, besides the muscadine, are the *grenache*, *mataro*, and *crignane*, for the choicest exported wines. The *pique-pouille noir*, the *pique-pouille gris*, the *terret* and *blanquette*, give wine clear and

good, but the wines destined to keep require nicety in selecting the plant. The *mataro* is the regular bearer as to quantity; the other sorts are sometimes abundant, often scanty in produce, and for the most part very irregular in bearing. In general, however, the vineyards are planted with ten or twelve species of plant, which are more or less esteemed for mixing. The new vineyards are formed wholly of the *crignane*, the fruit of which is black, saccharine, rough to the taste, and full of mucilage. The *mataro*, of which others are exclusively made, is very black, more saccharine, and gives out much spirit. The black *grenache*, of which entire vineyards consist, is remarkably sweet, spirituous, strongly impregnated with aroma, and is used to temper the fire of the other species. The mixture of these three kinds, in which the last species forms a third, and the second a quarter part, gives a product of late years, assorting best with the character of the wine in demand, and therefore that which cultivators labour most to carry to perfection. There is a species of grape called the white *grenache*, of Rodés-en-Conflent, a most valuable species, little cultivated, because it requires considerable time to bring it to maturity. The muscadine of Rivesaltes is made from this plant, as well as from three varieties besides, the Alexandrian muscadine, the round white, and, before all, the St. Jaques.

The vintage of the muscadine grape begins at the end of September, or the first week in October, and is performed at two separate periods. The time is always chosen when the dew is dried up, and the grape and earth are become warm from the solar rays. At the first gathering, the ripe grapes only are taken and placed separately at the foot of the tree, where they are left until they are dried or shrivelled up, after which they are taken away, and immediately replaced by the second gathering. The fruit is then trodden and pressed. Some suffer the fruit to dry up on the stem before the gathering takes place. Others take

it home, and place it on hurdles, exposed to the sun's rays; while it is the custom with a few to keep it five or six days, piled up in wooden vessels.

The must produced by the treading and pressing is very thick. It is put into barrels to ferment. Very frequently the wine is delivered to the merchant after being in the barrels only fifteen or twenty days, and without being cleared of the dregs. If not sold, it is racked a month or two after the pressing, and the dregs are then found to be very considerable.

The greater part of the other white wines are made from the species of grape called *blanquette*, which is picked out at the vintage from the red fruit with which it is mingled. Rivesaltes furnishes most of these wines. The vintage is completed at one, and not, as with the muscadine grape, at two pickings. Some growers leave the whole, with the stems and skins, to ferment twenty-four hours in the vat. There are two qualities of these wines, one dry and the other luscious. The same grape produces both; the soil alone causes the difference. The soils abounding in stone and quartz, such as St. Cyprien, Panissac, Lacombe-Clobal, Mas de la Garigue, and Lejas, at Rivesaltes, give the luscious white wine. The soils purely argillaceous, or calcareous, yield the dry. As the last kind is little in demand, they try to obtain a luscious wine from the *blanquette* grape, which is gathered when well ripened, and exposed on the warm earth to the full action of the sun for ten or twelve days. Eight hundred hectares, planted with the *blanquette*, each produce about twelve hectolitres of wine.

Good Grenache wine is made in the communes of Banyuls sur Mer, Collioure, Port Vendres, and some in the canton of Rivesaltes. This wine is not usually suffered to ferment on the murk. If it is suffered to do so at all, it is never for more than twenty-four hours. The fermentation takes place in the cask, and when it is eight or ten years old it is soft, generous, and delicate. When it is suffered to ferment on the murk for twelve or fifteen

days, the wine is longer clearing itself, is more generous, and acquires in age a fine topaz colour. It is ten or twelve years attaining full perfection. It then takes the designation of *rancio*, or rusty, and is distinguished from the wines of Roussillon as commonly denominated by its lusciousness, and particular aroma. Only about three hundred hectolitres of Grenache wine are manufactured. The residue of the grapes grown is mingled with the other species in the vats.

Malvasia and Macabeo wine are made by one or two persons in the canton of Rivesaltes with the grapes of those names. Very little is manufactured, and simply as a family provision; they are rarely met with for sale.

Red wine is seldom made in this part of France in open vats, but in large vessels, called *tonneaux à portes*. The product of the press, murk and all, is introduced by an opening from twenty to twenty-five centimetres square. It has a tight cover, in the middle of which is a hole, to give vent to the carbonic acid gas disengaged during the fermentation, favouring the condensation of a great part of the gas, which fills the void left between the top of the vessel and the contents. Thus by pressing on the murk, it prevents a too rapid fermentation, but slackens when the fermentation is complete, preserves the aroma of the wine and a part of the alcohol, which with difficulty exhale, keeps from the action of the air the upper part of the contents of the vessel, which is constantly bathed in the liquor, prevents its acquiring acidity, and contributes to extract the colouring matter of the skins. When the wine is deemed fit, it is drawn off by a cock, and the murk is taken out by a door in the bottom of the vessel towards the front, supported and crossed by two transverse stays, on the exterior and interior, which are secured by strong screws.

The wines of Banyuls, Collioure, and Port Vendres, are commonly purchased at the time of the vintage by the Paris merchants, who generally attend for that purpose. The

merchants buy most of the other growths which go out of the department for export. The wines are not drawn off before the sale, when it is not delayed until the March after the vintage, as at that time the red wines are always racked. In general it is done but once, and then only for the wine which is designed to keep long. Some growers, however, do it a second time in the March following, but always when the weather is dry. It is then kept until it takes the denomination of *rancio*, whether the barrels have been tapped or not. They are careful, however, to put them in a cool place, and as far as possible from a road or street, where heavy carriages pass. The longer the wine remains in the cask the better it becomes. They take care to preserve the tartar, which forms an interior lining, and prevents evaporation through the pores of the wood. A common custom with such as keep the wine by them to acquire age is, every year to draw off some bottles, and replace them with younger wine of the same vineyard. The new wine is introduced with a funnel and pipe, to avoid, as much as possible, any agitation of the fluid.

The white wines, and the muscadines, are bought on the dregs immediately after the vintage. They are not racked but when they are to be sold; and when not sold till March, as in the case of the red wines, they are drawn off. It is rarely the case that they are racked a second time before the sale. When intended for keeping, they are racked in the months of March the two first years. They give themselves no other concern about them, and never use any thing to fine or clarify.

The red wines remain ten or fifteen years in wood; at that age they have a golden tinge, and the taste of *rancio*, but they are not yet at their full perfection. They constantly deposit, and clarify better in the wood than the bottle. When after being fifteen years in wood they are bottled, they, for some time, show a deposit so great, that

even then, before bringing them to table in France, it is customary to decant them.

The white wines are bottled at two years old, and the Muscadines at four. The white wines will keep four years in bottle; after that time they lose their virtue.

The red wines and the Muscadines will keep more than a century, and still gain in quality. A French gentleman, on the authority of Cavaleau, (M. de Passa,) had, two or three years ago, some in his cellar that was made the year of the treaty between France and Spain, 1659. He said he hoped to leave some of it to his children in equally good condition, though the best part of two centuries old.

The wines of Roussillon are generally of a deep colour. One kind is luscious, spirituous, and rich in aroma, and is principally for exportation. The other species is of a deep colour, but of a less generous quality, and is consumed at home. As in other places, the same kinds of wine are of various qualities, and display a difference in their taste, colour, and strength, according to the nature of the soil, and the species of the plant predominating in the vineyards where they are grown. Some of the wines of the first class are grown in the communes of Banyuls, Collioure, and Port Vendres, before mentioned. Others, of which a part of the growths is exported, come from the same locality, and from the neighbourhood of Perpignan. They are of deep colour, and very sweet, but when aged, they take a golden hue, and gain a most delicate and agreeable taste. They have body and fineness; they lose their deep hue in eight or ten years; hence their golden colour, and change to *rancio*. They have the peculiar quality that when once separated from their dregs, they are not liable to be spoiled, though the casks or bottles remain but partly filled. The mean produce of the three vineyards is 15,807 hectolitres.

A wine from this department has been very recently introduced into England. It is a firm-bodied wine, of a very deep colour, with a fine violet tinge, good bouquet,

and rich, racy, mellow flavour. The growth of 1830, and consequently but a very young one for a wine of so full a body, it much resembles good port of an older vintage. It is smooth on the palate, much less fiery, and has the merit of not causing acidity in those temperaments which are subject to it, as readily as port does. This wine is not a factitious French Port from the harbour of Cette, or it would not have merited notice. It is a genuine product called Masdeu, from the vineyard which produces it, between Perpignan and Collioure. It is shipped from Port Vendres to England with the addition of a small quantity of brandy, and, like all the wines of that part of France, it will keep to a great age. Firmness and vinosity of a very perfect kind are its characteristics, while it so much resembles wine of the better kind from Oporto, that the most inveterate drinker of Portugal wine might easily imagine he partook of his favourite beverage. The vineyard of Masdeu is the property of the well-known bankers, Messrs. Durands. The grapes used are principally the Grenache, Carignane, and Mataro, all black. The vines are grown on the plains or on gentle slopes open to the south. The soil is stony, and the vines are set in the quincunx order. The produce is about six or seven hogsheads on the English acre. The wine is fermented in the large vessels already described, called *tonneaux à portes*. It is kept in vats of considerable size for twelve months before it is put into casks, each vat holding two or three thousand gallons.

At Collioure, which is situated about a league from Port Vendres, where the Masdeu above-mentioned is shipped off for exportation, both dry and sweet wines are made, of very good quality. The vineyards are on the first slopes of the bases of the Pyrénées, and the soil schist, with a slaty gravel. The hill vineyards are all planted terrace fashion. The produce is less than on the plains; manure is never used. Near Collioure the *vin de Cosperon* is made; a rich *liqueur*. The grape being rendered very mature, is pressed, but not fermented, and to the must a

very large proportion of brandy is added. This *liqueur* is nearly, if not entirely, consumed in France.

The wines of the communes of Rivesaltes, Espirande l'Agly, Salses, Baixas, and Peyrestortes, as well as that of Torren-Milar, near Perpignan, are wines of the first quality, and though inferior somewhat to the former, equally come under the denomination of wines of Roussillon. They are known as "wines of the plains" *(vins des plaines)*. They are longer losing their colour than the preceding wines, and do not, therefore, become *rancio* till they are two or three years older, though rarely kept for that purpose, except at Lejas, in the commune of Rivesaltes. These wines are of good consistence, and of real vinous strength, qualities always belonging to the wines of Roussillon. They are high coloured, fine, luscious, and heady, characteristics which they preserve in age. The mean product of these vineyards is 69,540 hectolitres, at twenty-eight francs. There are about 44,000 hectolitres of wine of a second quality, at twenty-four francs. There are also wines that are still inferior, but light and delicate, grown at Terrats, Corneilla la Rivière, Pezilla, Latour, and other places, and wines inferior to them, but as these are not exported, it is needless to mention them farther.

There are 10,800 hectolitres of white wine in this province, which are of the first quality, and sell for thirty francs. About three hundred hectolitres of Grenache, at forty francs, and the same of Muscadine, at eighty.

The gradation in the prices of the red wines of the first quality increases so much, that at eight years old they sell for a hundred and fifty francs the hectolitre, and choice growths frequently reach two hundred. The price bottled, which is only done when orders are given by the merchant, is from one franc and a half to two francs the bottle. Very old has been known to bring six francs. The gradation of Muscadine is nearly in the same proportion for the first three years. Old brings three francs the bottle, but it is rarely thus preserved, except in families. The gradation

in the Grenache wines is the same as in the red. The white wines are not kept, but exported or consumed immediately in the province.

The price of the red wine of Roussillon is not regulated by the scarcity or abundance of the crop. The cost is often higher after an abundant vintage than after a middling one, for it depends upon the abundance of the crop in the north of France and on its quality. In case of a middling vintage in the north, the wines of Roussillon are bought up to mingle with them, and impart to them body and flavour.

The department of the Basses Pyrénées, formerly Béarn, Navarre, Basque, and the Pays de Soule, produces some wines of good quality, generally white; in all 333,330 hectolitres, valued at 5,270,433 francs. Of these wines Pau affords the best; the commune of Gan also produces wines, styled *de primeur*. In this latter commune there is a little vineyard producing three hectolitres only, the wine of which sells for six francs a bottle. It is called Gaye Sicabaig, from the name of the owner. Before the revolution it belonged to a member of parliament at Pau, who sent the produce every year to the king. It exhibits a remarkable instance of the unknown qualities of the soil, which give a superiority to one spot over all around it, though to the observer the same in every respect, as far as human knowledge can penetrate.

The prices of the wines of Pau vary from twenty-five to seventeen francs the hectolitre. The wines styled *de primeur*, being of the first class, and keeping a long time, their value augments in proportion. At fifteen years old, the first growths of Jurançon and Gan bring two hundred francs the hectolitre. A wine grower at Gan, M. Pons, sold a barrel of his wine, thirty years old, for twelve hundred francs. It must be admitted that great attention is given here to the manufacture of the wines. The vintages are frequently prolonged to the end of November, and even December, at Jurançon, particularly for the white wines,

which are superior to the red, and have a perfume like the truffle.

The department of the Hautes Pyrénées, formerly the southern part of Gascony, is of a soil in general too elevated to grow very superior wines; yet 278,063 hectolitres are produced in this department, averaging 19·45 per hectare. These wines bear a low price, and are of low quality. Those of Argeles and Bagnères bring only ten francs the hectolitre. Those of Tarbes fetch eighteen francs the hectolitre, and are the best; generous, coloured, and tolerably clear. They are produced in the canton of Castelnau-Rivière-Basse, under the general denomination of wine of Madiran (vin de Madiran). They are not sold until they attain the age of four years, and those of the first quality alone are bottled. They will keep well for twelve years; after that period they alter much, becoming dry and heady. Some have been known to keep for twenty years. The want of a facility of carriage makes these wines little known out of the department. Some of them were formerly exported to the colonies from Bayonne.

There are some poor white wines made in this department, but they will not keep above a year or two.

WINES OF THE GIRONDE.

Under the denomination of the wines of the Gironde are included those of the districts in the vicinity of Bordeaux, in some directions for many leagues in extent. Of all the wines of France these are most familiar to foreigners beyond the seas, being exported in the largest quantities. The department of the Gironde is part of ancient Gascony, and is rich in the produce of the vine. In the quantity produced, in the variety, in quality and value, it stands the first district in France, and in a commercial point of view it is the most important.

With a minuteness, which the reader will readily perceive, all the details respecting the wines of Bordeaux are

given, on account of their being so much used in England, and curiosity being on that account more alive here respecting them than any of the other wines of France.

The extent of vineyard ground in the department of the Gironde is no less than 137,002 hectares, or 342,505 acres. Some state that the number of hectares of vineyards is 141,221, embracing every kind and sort of vine cultivation used. Of these 46,931 appertain to the arrondissement of Bordeaux alone. The arrondissement of Bazas has 5,486 hectares of vine; Blaye, 16,830; Libourne, 30,996; Lesparre, 18,050; Réole, 18,709. Their total product in wine is 2,805,476 hectolitres, or 73,643,725 gallons, at 18·72⅔ per hectare; a prodigious quantity, valued at no less a sum than 49,177,454 francs, or 2,007,398 pounds sterling. Of this one-half in value is grown in the arrondissements of Bordeaux and Lesparre alone. In some years the produce has reached 360,000 tuns.

Of the 2,805,476 hectolitres above mentioned, 1,864,461, or 204,436½ tuns are disposable, the rest is distilled or drank in the province. It is computed in France that a third more in quantity, beyond that grown in the province, is exported from Bordeaux. This is drawn by the merchants from Spain, and from other departments of France, such as the Lot, Lot and Garonne, Haute Garonne, and others, and is mingled with the genuine wines of the Bordelais for the foreign market; it, therefore, must be added to the wines exported from the department. The traffic in these and other wines by sea from Bordeaux is very great, being nearly 500,000 hectolitres per annum.

The value of wine estates is very considerable in this department. The Mouton estate, of 135 acres English, brought, in 1830, 356*l.* per acre. The Lafitte, of 262 acres, brought 183*l.* 4*s.* per acre as long ago as 1803. Every acre of the Medoc estate is worth from 60*l.* to 70*l.* taking the entire average.

The districts or arrondissements on the right bank of the Garonne come first, one of which, that of Libourne, is

situated on the banks of the Dordogne, going from the north-west to the south-east. Of these districts that of Blaye produces 6,215 hectolitres of wine, of one hundred and eighty or two hundred francs the tun[1]; the rest may average one hundred and fifty. The wines of the canton of Bourg, or Bourgeois, are not so deeply coloured as those of Blaye, but they are of good quality. They should be kept eight or ten years before they are drank. They were once esteemed above those of Medoc, though now they rank in repute only with the inferior kinds of the latter class. In a good year they have strength, a fine colour, and, by keeping, lightness; together with a taste of the almond. The vine plants most cultivated in the canton of Bourg are the *merlot*, the *carminet*, the *mancin*, the *teinturier*, the *petite chalosse noire*, and in poor soils the *prolongeau*. The *le petit* and *gros verdot* are cultivated in the Palus, or alluvial land situated between the Garonne and Dordogne, consisting of river flints and alluvial deposits. Hence the "wines of the Palus." The Palus of Dordogne produces wines superior to those of Libourne, which are from a light soil, and of light quality. These latter wines are grown at Castillon, St. Foi, Branne, Coutras, and Guitres, in that arrondissement.

The hill wines manufactured in that neighbourhood, are of a superior quality to the foregoing, such as those of Fronsadais, Neac, Lussac, St. Estèphe, de Puisseguin, and Montagne. With this quality of wines also may be ranked those grown on the level grounds where the soil is sand and gravel, with earth and calcareous elements. The land in which it is presumed the most silicious matter exists, seems the most favourable to the vine in the Gironde. The wines in repute, such as those of Pommerol and of the environs of Libourne, as well as some places in Lussac, Absac, and St. Denis, are grown in sand and gravel. These belong to the most distinguished hilly sites, as also those of

[1] This is a nominal measure of four barrels.

St. Emilion, Cenon, and Barbe-Blanche, near St. Emilion, considered the finest. Among this class Cenon and St. Emilion are most regarded. The wines grown on pure quartz and sands with alluvial matter, are of a white colour, and very intoxicating. In respect to site in Medoc, the south-eastern declivities of hills are preferred.

But two names are given to the two qualities of wines from the hills in this district, *vins fins* and *vins de côtes*. Of the first 51,660 hectolitres may be reckoned the average produce, and of the second 103,320. The common wines, in addition, in the same district, may amount to 154,980 hectolitres. The common wines bring from a hundred to a hundred and fifty francs the tun, including the Palus wines. The wines *de côtes* from one hundred to one hundred and fifty, and the *vins fins* from two to three hundred francs in abundant years. In ordinary years a third more, and in years of scarcity nearly double. The common red wines are bottled a year or two after the vintage, and are in perfection in three or four. The wines *de côtes* are bottled three years after the vintage, and are in perfection at ten, while those of St. Emilion, Cenon, Barbe-Blanche, Grenet, and Pommerol, are not bottled for four, five, or six years, and increase in excellence for twelve more.

The age of wine is reckoned in Bordeaux by *feuilles*, or leaves, the number of times the vine has flowered since it was made. The vine cultivation of the Gironde, in Medoc particularly, is very superior. The vines are kept low, and trained in espalier fashion. In the Palus, they let the tree mount to five or six feet. In the district between the two seas, the vine is planted of late years *en jouailes*, or in furrows, leaving seven-eighths of the land for corn, yet yielding more wine than in the old mode. The quality of the wine is always considered to depend on the pains taken in the cultivation of the plant. Sauterne has gained its reputation by modern labour. The vineyards have now four ploughings, and three spade turnings, the vines being in single rows.

The St. Estèphe wine has an aromatic violet-flavoured perfume. That of Cenon is fine, light, and spirituous. St. Emilion has plenty of body, and superior flavour and fragrance; and, as well as the wines of Bourg generally, Tourne, and their vicinity, acquire flavour by age, and a more perfect bouquet. The shipping price of the good is about two francs the bottle.

Every year for five years after being bottled, the wine *de côtes* gains fifty francs per tun in price, and sixty or eighty francs each succeeding year. The *vins fins*, and those grown on the choicest spots, gain yet more; so that when eleven or twelve years old, they fetch from two thousand to two thousand four hundred francs the tun. The prime St. Emilion, Cenon, and Barbe-Blanche, above their twelfth year, sell for three francs and three francs and a half the bottle.

The best wine *de côtes* is made with the grape called *noir de pressac*, the *bochet*, and the *merlot* and *carmenère*.

The arrondissement of Reole produces only common wines at the price of a hundred and thirty francs the tun. The best of these wines come from the communes of Aubiac, Verdelais, St. Mexant, St. Andre du Bois, and above all Caudrot.

The red wines in the arrondissement of Bazas bring generally a less price still, only about ninety-five or a hundred francs.

The chain of high hills which extends itself along the right bank of the Garonne, from Ambares to the arrondissement of Réole, produces wines known as *vins de côtes* in commerce. These are good ordinary wines, and little more. They acquire quality by age, are in general firm and of good colour, and, out of France, are principally consumed in Holland, Denmark, and the ports of the Baltic. In the class of *vins de côtes* the merchants of Bordeaux comprehend also the vineyards on the Dordogne, from Blaye to Fronsac; but only as ordinary wines, with the exception of St. Gervais, St. Andrè de Cubsac, St. Romain,

Cadillac, St. Germain, and St. Agnan, which produce somewhat better kinds. The communes of Bassens and Cenon give the best wines *de côtes*, which are most of all distinguished by their colour. Those of Floirac, Bouillac, and la Tresne, are not so good, having a slight earthy taste. The wines of Camblanes resemble those of Bassens, have more body and colour, but are less capable of keeping. Quinsac, Cambes, and Baurech, produce but little red wine of tolerable colour, and for the most part of ordinary quality.

The Palus wines have been already alluded to. These vineyards are situated on the rich and fertile alluvial lands on the banks of the Garonne and Dordogne. Formerly the best vine plants only were cultivated in them, but now plants more common, but more productive, have been substituted. This is to be lamented, for the good quality of the wines has deteriorated in consequence. These wines at present are, notwithstanding, high-coloured, and free from any earthy taste, but are generally a little, as the French style it, *mous*, and rough, imperfections excused from the greatness of the produce. By age, or a sea voyage, they acquire an agreeable bouquet, much body, and flavour. They should be kept seven or eight years in wood, to obtain their full quality; after which they will remain good a long time in bottle. The vine crops of the Palus, or alluvial districts, are more uncertain than those of other soils differently situated. The vines are supposed to be rendered more sensible of atmospherical changes, from being in humid low land during winter.

The Palus district is classed in five divisions. The first is Quéryes, on the right bank of the Garonne, opposite Chartrons, one of the suburbs of Bordeaux. The wines grown there are reckoned the first in quality of the class. They have a deep tinge, much body, and acquire by age an agreeable bouquet of the raspberry. They are often mixed with weak wines, to improve their body and colour.

Bassens and Mondferrand grow the second class of

Palus wines, and are from forty to sixty francs per tun less in price than those of Quéryes. The third class is grown in the communes of Ambès, Bouillac, Camblanes, Quinsac, les Valentons, St Gervais, and Bacalan. The fourth, in St. Loubés, la Tresne, Macau, Beautiran, and Ison. The fifth in St. Gervais, Cubsac, St. Romain, Asque, and the isle St. Georges.

All these communes produce wines of good body, fine, and high coloured, capable of bearing a sea voyage well; hence they are generally distinguished as wines *de Cargaison*, because they are so largely exported. The mean prices are three hundred and thirty, two hundred and sixty, and two hundred francs per tun.

The district styled the Graves composes another vine growth on the left bank of the Garonne, thus named from the gravelly soil, which is found extending three leagues to the south, and two to the west of Bordeaux. In this district the *merlot*, three varieties of *carbenet*, or *carmenet*, the *verdot*, *melbeck*, *balouzat*, and *massoutet* grapes produce the delicate Graves wines. They are generally fuller in body, and more coloured and vinous than the wines of Medoc, but the last are preferred for bouquet and flavour. They are kept six or eight years in the cask, according to the temperature of the year in which they are made. They keep a long while, and in twenty years lose nothing of their good quality.

There are five sites where the better wines of the Graves are grown, Merignac, Léognan, Villenave d'Ornon, Talence, and Pessac. The first produces about a thousand tuns of agreeable red wine; while Léognan gives seven hundred tuns of wine more firm than those of Merignac, and said to taste a little earthy. They have a good body and colour, but are less smooth on the palate than the others. Formerly these wines were exported to Ireland, but at present they are sent principally to the north of Europe. About five hundred tuns of red wine are grown at Villenave d'Ornon, but it is not equal to that of the

foregoing districts, having less body. The excellent qualities of the white wine made there have gained for it a reputation well deserved. Talence produces about eight hundred tuns of red wine, ranking with that of the second or third quality of Pessac. This last district of the Graves yields from a thousand to fifteen hundred tuns, generally of a lively and brilliant colour, with more body than the wines of Medoc, but less bouquet, raciness, and fineness. The first growth of this noted commune is Château Haut Brion, half a league south-west from Bordeaux. The wine here is considered equal to that of the three first growths of Medoc, although its character has been injured for some years from the employment of too much dressing. The wines of Haut Brion are not bottled until six or seven years after the vintage, though some of the first growths may be drank at five years old. The flavour resembles burning sealing wax; the bouquet savours of the violet and raspberry.

Gradignan, Martillac, la Bréde, Beautiran, Castres, St. Selve, and Portets, to the south of Bordeaux, furnish the wines known as the small red Graves wines *(petits vins rouges des Graves)*. These are ordinary wines, some of which improve greatly by age. The merchants of Bordeaux comprehend under the foregoing name the common wines of Cauderan, Bouscat, Bruges, and Eysines, generally sold for consumption in that city.

The next, and fourth district of the Bordelais, is that of Medoc, the most important of all for its extent, and the quality of its produce. Its shape is that of a large triangle, of which the summit is acute, formed by the left bank of the Gironde, close to its mouth, and the western shore of the ocean at the entrance of the gulf of Gascony. The base is an oblique line drawn from the left bank of the Garonne at La Teste, passing by Blanquefort.

The Medoc district is an immense plain, divided on the side of the Gironde by small hills, which produce the best

wine. These hills are covered with a light gravelly soil, intermingled with flints in great quantity, of an oval form, about an inch in diameter, and of a whitish grey colour, from one to three feet deep, below which is found a dry and compact red earth intermingled also with flints. The second species of ground occupied by vineyards is a gravelly sand. At eighteen inches from the surface, in some parts of this soil, is found a bottom of clay, or potters' earth; in other places dead sand. A mixture of gravel and soil often occurs called *l'alios*, bound with ironstone, not very favourable to the vine; in fact, it must be penetrated to make the vine succeed well, that the moisture may descend beyond the roots. Parts of the same vineyard are often good, and often untractable from no discoverable cause. In no other place is the earth more varied in quality or in product. The estates also are much divided.

The *carbenet*, *carmenet*, *malbeck*, *cioutat*, *pied de perdrix*, and *verdot*, are the plants most cultivated in the plain of Medoc. The wine, when in perfection, should be of a rich colour, a bouquet partaking of the violet, very fine, and of a very agreeable flavour. It should be strong without intoxicating; revive the stomach, and not affect the head; leave the breath pure, and the mouth fresh. A sea voyage, fatal to some of the best wines of France, does not alter the quality of these fine wines of the Gironde, but, on the contrary, it is observed to ameliorate even those of an inferior class. The wines of Medoc, however, have their defects, one of the principal of which is, that most of them tend to decomposition in sixteen or seventeen years, though some growths will last ten or twelve longer. The expenses of wine cultivation in Medoc are very considerable. A vine dresser gets 1f. 60c. per day. An experienced labourer not domiciled from 2f. to 2f. 25c. The wine-press-men have 50c. more than others. The vineyards are often cultivated by a wine dresser at task

work, who receives 150f. in money, half the cuttings, four barrels of *piquette*[1] wine, a lodging, and a small garden. On the *Graves* the bargainer or *prixfaiteur* has 380f. as well as cuttings, wine, lodging, and garden; but then he does the work of both the plough and spade.

The first commune of Medoc, two leagues from Bordeaux, descending the river, is Blanquefort, producing a thousand or twelve hundred tuns, of which four or five hundred are white, generally known as white wines of the Graves. They are for the most part dry and agreeable, and do not want strength. The first growth of this district is Dariste, formerly Dulamon. The red wines are of an intermediate quality, and most of them exempt from that earthy taste, which is too perceptible in some of the hill wines, as well as in those of the low lands. Their colour is good, and they have a bouquet, which is not developed until they have been some time in bottle. They were once exported to America, but are now consumed for the most part in the North of Europe. The second commune, Ludon, produces five hundred tuns of red wine, superior to that of Blanquefort. This superiority arises from the nature of the soil, which is for the most part gravelly, yet some portion of it, though a small one, is marshy and alluvial. The Dutch are very fond of these wines, because they unite the qualities to which they are partial, high colour, raciness, and an aromatic taste; and they are utterly free from tartness, a defect in a Dutchman's view for which nothing can compensate.

Macau is the next commune, situated in a plain, two-thirds of which are Graves, and one-third Palus. The wine produced here is neither as agreeable nor racy as that of Ludon. It has, however, a deeper colour, and good body. Macau produces seven or eight hundred tuns of red Graves, and about two thousand of Palus, much inferior in quality to the Graves. Labarde, the next com-

[1] Small wine.

mune, generally gravel or sand, produces three hundred, and sometimes four hundred tuns of superior wine to that of Macau, easily observable in its body, colour, and bouquet. Cantenac, the fifth commune, is remarkable for the excellence of its wines, of which the product is from one to two thousand tuns. These wines are of exquisite taste, rivalling the best in Medoc, whether for the bouquet or raciness which characterize them, besides which they have colour, body, and are agreeably aromatic.

Margaux produces from a thousand to twelve hundred tuns. The soil of this renowned commune is gravelly, intermixed with a great number of flints. Its vines are the most esteemed in the whole tract. In this commune is grown the famous first quality, Châteaux Margaux. In average years about eighty tuns of the first growth, and twenty of the second, are all which is made. The wines of Margaux, when in perfection, in a favourable year, have great fineness, a rich colour, and a soft bouquet, which is balmy to the palate. They have strength without being heady; and leave the mouth cool. These wines are well known in England, though the wine of the first quality is rarely met with genuine in this country. It is in Margaux also that the wine called Rausan is produced.

The wines made in the communes of Soussan, Arcins, Lamarque, Cussac, Le Taillan, Lapian, Arsac, Castelnau, Avensan, Moulis, and Lestrac, differ from each other, though in no very remote degree. Those of them which are exported go principally to Holland and the north of Europe. These communes are all in the Medoc district, and in the arrondissement of Bordeaux.

St. Julien de Reignac, in the arrondissement of Lesparre, is the eighteenth commune of the Medoc vine country. It produces a thousand or twelve hundred tuns of wines, very inferior to those of Margaux. They have a peculiar bouquet, by which they are distinguished from all the other wines of Medoc. Kept five or six years in wood, they attain the character of good wines. The inferior growths

of La Rose and Léoville are the produce of this commune.

The nineteenth commune of Medoc is St. Lambert, producing six or seven hundred tuns of good wines of nearly the same quality as those of St. Julien. In this commune is made the famous wine of Château Latour. This wine is distinguished from that of Château Lafitte by its superior body and consistence; but it should be kept in wood at least a year more than the Lafitte to attain a proper maturity. This is a favourite wine in England; it is produced on a soil of sand and gravel, and in favourable years is nearly all purchased for the British market. The price is about the same as that of the Château Lafitte and Château Margaux. In ordinary years from seventy to eighty tuns only are made, rarely more than a hundred in the most abundant, at least of the first quality. It is less fine than Lafitte.

Pouillac, another celebrated commune of Medoc, produces from three to four thousand tuns of a wine racy and full of bouquet. In this commune is grown the celebrated Château Lafitte; a wine surpassed by none of its rivals. About a hundred tuns of the first quality only are annually produced, and twenty or thirty tuns of inferior growth. Nearly all the Château Lafitte, and indeed most of the other growths of this commune are consumed in England. It is lighter than Château Latour, and may be drank somewhat less in age. The wine next in quality to Lafitte is that of Mouton, or Branne-Mouton, of which the produce is from a hundred to a hundred and forty tuns.

St. Estèphe produces four thousand tuns of wine, of a different quality from all the other Medoc wines. Light, agreeable, and aromatic; they are generally bottled after being three years in the cask. St. Julien nearly the same. The wine of St. Seurin de Cadourne furnishes about three thousand tuns annually of indifferent and very unequal wines in respect to quality.

The wines of the district of Haut Medoc are all compre-

hended in the foregoing list. The prices fluctuate greatly, being dependant upon the season; so that in favourable years wines bringing thirty pounds a hogshead, will not bring five in those which are unfavourable. The fine wines in good years fetch for shipment 14*l.* 10*s.* per hogshead, and average years about 6*l.* In bottle from two to six francs. Those called in the country *le derrière du Haut-Medoc*, are St. Laurent, St. Sauveur, Cissac, and Verteuil, generally wines of tolerable quality. About three thousand tuns in quantity are made, some of which are exported to the north of Europe. The soil that produces these wines and the foregoing is light and stony, with quartz. Below is found ferruginous pudding stone, or *alios*. The exposure is little regarded. The more gravel the better wine. The vines are planted in rows, three feet asunder. The vines bear here at five years old. There are vines in Pouillac two hundred years old, but they are upon dry soils to a great depth. Manuring is repeated every ten years to the very roots. The communes of Taillan, Lapian, Arsac, Castelnau, Avensan, Moulis, and Lestrac, already alluded to, come under the same general name and treatment.

The Bas Medoc is applied to the wines grown in the communes of St. Germain, Lesparre, St. Trélody, Potensac, Blaignau, Uch, Prignac, St. Christoly, Civrac, Bégadan, Gaillau, Queyrac, Valeyrac, Jau, and St. Vivien; the quantity of the whole produce varies from four thousand eight hundred to six thousand tuns. These wines are for the most part touched with an earthy taste. In good years they are reckoned agreeable wines for exportation, when well selected, as their quality improves by age.

Many vineyards, not mentioned above, produce an ordinary wine consumed in the province. The mean product of the red Medoc wines is 37,660 tuns, or 343,459 hectolitres.

The wines of the first class in Medoc, including that of Haut Brion, which is considered as such, sell for about two thousand three hundred francs the tun. Those of the

second growth for two thousand; of the third, fifteen to eighteen hundred; and of the fourth, twelve to fourteen hundred. The prices augment annually until the fifth year, when they are generally double the first; in like manner they diminish in the descending quality, down to the sixth or seventh class.

The wines are classed by the brokers, who decide to which class the wine of each grower shall belong. The latter use all their efforts to place their wines in a higher class, and thus emulation is kindled, and they are justified in their efforts by the profits. The price of their wines too, is less governed by particular merit, than by the number which they occupy in the scale of classification. It often costs them sacrifices to reach that object. They will keep their wine many years to give it a superior title, instead of selling it the first year according to custom. By this means an individual will get his wine changed from the fourth to the third class, which he had perhaps occupied before for many successive years.

It may not be amiss to state that what are called *vins de paysans*, or peasants' wines, in contradistinction to those of the great proprietors, though grown on the spot, are less valued. This distinction is just. It is very often found that vines of the best character, planted in the midst of vineyards which produce the first growths, do not afford wine of the same quality. The peasant is, perhaps, less attentive to his patches than the large proprietor, or works on too small a scale; he secures his wines less carefully from the air; is less delicate in the choice of his dressing, or at the vintage he does not wait, as the great proprietors do, the days most favourable for gathering the crop, nor form distinct classes of the first, second, and third pressings; whichever of these be the cause, the wine is held in less estimation.

As soon as the wines are in the cask, the greatest care is devoted to preserve and ameliorate them. They are fined and racked for the most part twice a year, in March and

September or October, and evaporation is carefully guarded against. After they are five years old they are racked but once a year, in March.

The first growths of Medoc are never sent to England in a perfect state, but are, when destined for that market, mingled with other wines and with spirit of wine. The taste of the pure wine is not spirituous enough for the English palate, and more body is given these wines by the mixture of Hermitage, of Beni Carlos from Spain, and alcohol, ordinarily to the extent of three or four-twentieths per cent. By this means all the delicate flavour, the delicious and salutary quality of the wine is destroyed, to give it a warmer and more intoxicating effect, without which in England these wines would not find a market. Mixing Hermitage or Beni Carlos alone with the wines of Medoc would not be prejudicial, though it must alter their delicate quality. Beni Carlos is often mixed with Medoc wines, when they are nearly worn out, to restore their body. Natural and healthful wines, the genuine offspring of simple fermentation, are not the fashion in England; hence artificial means must be used to please an artificial taste. The Dutch import these wines on the lees, and treat them as they are treated in France, drinking them pure and unmixed. Russia and Prussia import them pure, and of little age. They also drink them unadulterated with spirit, as would be done in England, if the real use of wine or if health itself were kept in view.

White wines are often mixed with very high-coloured red, such as Palus wines, or those from certain cantons of the Dordogne, the Lot et Garonne, and Languedoc. These practices have increased in France of late years, and though occasionally useful, are too frequently prompted by lucre. To such an extent is the practice carried, that serious fears are entertained by many Frenchmen it will do an injury to the credit of the wines of Bordeaux, and by that means to the commerce of the city. False stamps

are sometimes put upon the bottles. The best mode for the stranger is to deal with old and respectable merchants alone.

The vines in Medoc and Graves are planted at a distance of three feet from each other every way. The main stem of the plant is only allowed to attain a foot in height, and is fastened to stakes of the same dimensions. To the stakes are joined laths or switches, ten or twelve feet long, horizontally, on which are laid two branches of each vine, left when it is pruned for that purpose. The plough is applied four times to the intervals between the rows. The grapes are thus prevented from touching the ground, when proper attention is paid to keep the branches fastened to the laths, and they receive both the direct and reflected heat of the sun when they are properly pruned. This is considered the most perfect method known for the cultivation of the vine.

Here the account of the red wines of this fertile district must end; in white, the department of the Gironde is less rich.

At Blaye, Libourne, and Réole, the white wines are of a very common quality, and are often sold under eighty francs a tun. They are made from a plant vulgarly denominated *enrageat*, or *folle*, from which is distilled the prime brandy of Angoumois and Saintonge. Bazas produces more white wine than red, from the *Blanquette*, or *Blaguais* grape. The greater part is common in quality, from a hundred to a hundred and fifty francs the tun. The best are produced at Fargues, Langon, St. Pardon, St. Pierre de Mons, Toulenne, and above all Bommes and Sauterne.

The best white wines of the arrondissement of Bordeaux are grown in the Graves, and in the southern part near Bazas, as far as the canton of Podensac in the communes of Barsac, Preignac, Cérons, Podensac, Virelade, Illats, Landiras, Pujols, to which may be added St. Croix du Mont.

The white wines of a superior quality are divided into

dry and luscious, and those again into first and second growths. The dry are generally the product of the Graves. The first in quality are Carbonieux, St. Brice, Château du Lamont, Pontac, Sauterne, Bommes, Barsac and Preignac.

The second growths are Cérons, Podensac, Virelade, Illats, Landiras, Pujols, St. Pey de Langon, St. Croix du Mont. The first growths of both kinds are sold at about a thousand francs, the second growths six hundred and fifty. But the price augments with age, so that at ten years old the wines of Sauterne, Bommes, Barsac, and Preignac sell often at two thousand francs, and sometimes as high as three or four thousand per tun. It is hardly of use to follow down the wines of this district further. The third class may be defined by the price of 800 or 600 francs.

Bas Medoc, or that part of it in the arrondissement of Lesparre, produces nearly ten thousand hectolitres of white wine of small value, mostly consumed in the wine-shops. In the commune of Ordonnac, there is a small vineyard of eight hectares in extent, belonging to the ancient Abbey of Ile, which has an odour of roses, and sells, when a few years old, at seven hundred francs a tun, instead of two hundred when newly made. Among other methods taken to ameliorate the wines in this district, a certain quantity of the grapes are passed through an oven. With what degree of heat, or for how long this takes place, or what proportion of the grapes are so operated upon, it is impossible to say without more local knowledge.

The best class of white wines in this district are not bottled, more especially the sweetish sorts, until they are seven or eight years old, or older. They keep a long time. After the first racking, they are placed in vessels or vats, holding thirty hectolitres and more, where they keep better and lose less by evaporation. Two rackings a-year are deemed necessary to mature these wines.

To obtain the more luscious wines, it is requisite that

the raisins be, in the language of the wine-makers, *pourri*, or rotten, or in such a state that the skin can be detached from the pulp on the slightest pressure. As all the grapes on the same plant cannot be in this state at once, four or five different gatherings, or rather cuttings of the ripe grapes take place as they reach the requisite state, for which purpose the scissors are used.

Those wine-growers, anxious to bring their white wine to the utmost possible perfection, take the must from the press into large vats, where the lees are precipitated to the bottom, and then ascending again form a crust on the surface. In this state it is left nearly twenty-four hours; and when it is perceived that the crust begins to crack or open into gaps, the must is drawn off by a cock placed at the bottom of the vat. By this process the wine is obtained, sooner fined, and keeping its colour to the last, when due care is taken to bung the casks up carefully the moment they are filled.

The best vines for the more valuable white wines, are the species denominated *sauvignon*, *semilion*, *rochalin*, *blanc doux*, *pruneras*, *muscade*, and *blanc auba*. The *semilion* should form two-thirds of a vineyard consisting of these seven species of plant.

The white wine vines in the best vineyards are planted in *joailles*, as it is called, or in an arrangement composed of one or two rows of plants, at two and a half or three feet asunder, removed to the distance of six and a half feet from another range, and this interval is four times ploughed over.

The quantity of white wine made in the department may be about 1,185,904 hectolitres, of which 619,000 are produced in Libourne, 269,280 in Bazas, 100,000 in Bordeaux, and the remainder at Blaye, La Réole, and Lesparre. The superior wines made in Bazas may be arranged as follows in respect to quantity and quality:— Bommes, 7,985 hectolitres at forty-six francs; Sauterne, 6,430 at forty-six; Fargues, 8,026 at thirty-eight; Lan-

gon, 11,856 at thirty; St. Pardon, St. Pierre de Mons, Toulenne, 18,933 at thirty-one. In the arrondissement of Bordeaux, the wines of Preignac, Barsac, Carbonieux, St. Brice, Château du Lamont, and Pontac, reckon 20,000 hectolitres at forty-six. St. Croix du Mont, Cérons, Podensac, Illats, Laudiras, and Pujols, at thirty-nine; 25,000 at thirty-three; 33,010 at twenty. It must still be borne in mind, that the prices of these wines augment with their age so much, that the sweeter kinds reach two hundred francs the hectolitre. (*See Appendix*, No. II., for prices at Bordeaux.)

The product called claret in England, from *clairet*, is a mixture of several sorts of wine, as already observed. Beni Carlos and Bordeaux are thus mingled up for the English market; sometimes Languedoc and Bordeaux, at others Hermitage or Alicant with Bordeaux, and uniformly a portion of spirit of wine in addition. Mr. Brande reckons only 12·91 of spirit in claret wine. This quantity cannot be uniform; it must frequently be more, and rarely less than that quantity, as claret is a manufactured wine, and not the work of one manufacturer alone, who would, in all probability, regulate his proportions by some uniform standard.

The unadulterated wines of the Gironde most held in estimation in England are equalled by other varieties in the department, some of which are rarely imported into this country. The consumption of claret in Great Britain has been on the decline for several years past, for what reason it is impossible to pronounce. It appears that the Spanish wines gain upon those of France and even of Portugal. The high retail prices of the Bordeaux wines also are generally maintained, notwithstanding the reduction of duty. No district in the world surpasses the present in the excellence of its growths, and the variety of its products. The consequence has been, that the Bordeaux merchants have found it convenient to make pretended exports in some good years, of much larger quantities of

wine of prime growth than the country has produced. This they were enabled to do by the substitution of other kinds, which, in good seasons, nearly approach in excellence those of which they were counterfeits. Haut Brion, Gorce, Branne Mouton, La Rose, Rozan, and others, make very close approaches in quality to the best products of the department.

The exports from Bordeaux to England in 1832, according to the Custom-house there, were 1,132,063 litres. Of these 896,470 litres were in cask, and 235,593 in bottle.

THE DORDOGNE.

The department of Dordogne (ancient Perigord), affords 660,704 hectolitres of wine, or 10·27 per hectare, valued at 11,913,854 francs. About fifty thousand hectolitres are distilled, and 310,704 exported, or cellared to meet deficient years. Bordeaux is the principal receptacle for the wines of Bergerac, which are sent farthest away from the department, of which it is one of the arrondissements, producing nearly half the value of the entire quantity grown in the Dordogne. From Bordeaux these wines are sent to Paris, to Holland, and the north of France. Brandy is mixed with them in the proportion of a velte to a barrel of two hundred and twenty-eight litres. The sweet white wines of Bergerac were sent to Holland formerly in much larger quantities than at present.

At Bergerac the best red wines much resemble St. Emilion, or those wines known in the Bordelais by the denomination of *bons-côtes*. They are of a generous quality, and in gaining age acquire bouquet.

There are two distinct classes of white wine, the dry and sweet. The sweet is generous, and strongly perfumed; in the taste the Muscadine grape predominates. It has some resemblance to Frontignac as respects bouquet, but is more vinous. The dry wine is less spirituous, less per-

fumed, lighter, but without tartness or roughness. When carefully kept until old, it approaches Barsac in *sève*. These wines may be drank at five years old, but should be kept until eight or ten, when they are better. They will keep good fifty or sixty years.

The red wines are bottled at four or five years old, and will keep well for thirty. Neither the red nor white are kept for sale until they are very old. The sweet white brings from two to three francs a bottle in the country. The manufacture of red wine constantly increases upon the white, so as to make it nearly four-fifths of the total quantity manufactured.

The best wines are produced on the hills, upon the left bank of the Dordogne, in the communes of St. Laurent and Monbazillac. Among the most esteemed growths of white are those of Tcoulet, Marsallet, Raulis, Suma, Borderie, and Abrio, containing one hundred and twenty hectares. The best red are produced at the vineyard of Terrasse, ten hectares in extent, at the two vineyards named Les Farcies, seventy hectares; Brunetière, twenty hectares; these also produce good white wine. The price of both is nearly the same, about thirty-three francs the first quality.

The plants most cultivated are the *semilion* and *muscat-fou*. When the grape has acquired a deep golden colour, and the flavour is sweet and perfumed, so that no acidity is perceived, the maturity is not sufficient to make very sweet wine: they wait until the skin is a shrivelled brown, and nearly decomposed; then the maturity only is deemed complete, and the grapes thought insusceptible of further improvement. When a part of the bunches have reached this state of maturity, they begin to gather them. For this purpose they visit the vine about ten in the morning, taking care never to gather the fruit during wet weather. When the bunch is wholly ripe they take it off entire; but when only a part of the grapes are so, these are taken from the bunch, which they do not itself separate until all

the grapes which are appended to it are ripe, and these they take in succession. The vintage is thus rendered very tedious and expensive.

Every evening the grapes are trodden. They are pressed five or six times, until no more juice remains in the murk. The must is placed in an uncovered vat. When the temperature is warm, fermentation takes place in two or three hours. It is much slower in cold seasons. When the mucilage and impurity in the must mounts to the surface, and there forms a thick head, of a greyish colour, in which numerous cracks are observable, the fermentation is sufficiently advanced. The lees then mingle anew with the must, and soon render it troubled. To prevent this, the wine is drawn off by a cock in the bottom of the vat, and placed in tuns. The wine is often kept too long in the vat, exposed to the air, and they are not in general careful in the barrelling, by which means it is not so good as it ought to be. The grapes, red and white, are also mixed instead of being sorted. Some growers, who have only suffered the wine to remain in the vat five or six days, instead of twenty or thirty, have found it greatly improved.

The department of Vienne, formerly Haut Poitou, produces 435,451 hectolitres of wine, of mediocre quality. There are, however, some excellent white wines grown at Loudun, in this department, which merit to be more generally known. At Poitiers, the vineyards of St. Georges, Louneuil, and Couture, Champigney, Dissay, and Jaulnay, about 1650 hectares in extent, produce the secondary wine, which fetches only fifteen francs the hectolitre. In the arrondissement of Châtellerault, the vineyards of St. Romain and of Vaux give some red wines, which average eighteen francs. At Loudun, the vineyard of Bellecave, situated in the commune of Saix, Solomè and Roiffè produces the best. It is the custom in this department to make no partial sales of their wine; a cellar with fifty or sixty barrels is disposed of at once. At Chalais they make

a wine like Champagne. It is managed with care; is sweet, light, and delicate to the taste. It is bottled in March, having been fined the preceding January.

In the department of the Nièvre, formerly the province of the Nivernais, a considerable quantity of white wine is made, including eighteen thousand hectolitres of Pouilly, grown in the arrondissement of Cosne. There are also some tolerable red wines, in quality resembling Bordeaux; the growths of the latter are those of Saulayes, Perrières, Conflans, and Vauzelles, near Nevers. The mean price is twenty francs, and they will keep fifteen years, exclusive of three in wood, and three in bottle, which they occupy in reaching maturity. The wines of Château Chinon, though of inferior quality, bring four francs more than those of the above-mentioned growths. The wines near Clamecy are equal to the foregoing in price and quality.

Cosne is best known for its white wines called Pouilly, in considerable repute in Paris. These wines are produced on the sides of the hills bordering the Loire, called the *coteaux de* Lossery, Prée, Nues, and Roche. The three first grow white wine, the last red. There are a few qualities of white, the best of which is small in quantity, and much of it is consumed on the spot, being an effervescing wine. Its price is about fifty-two francs the hectolitre, being sold generally by the *quart*, of a hundred and fifteen litres, at sixty francs. The second quality, which is also considered a prime growth, sells from forty-three to fifty francs. The third for twenty francs, and the fourth thirteen.

In the departments of the Lot, and the Lot and Garonne, parts of ancient Quercy, and of Guienne, there are some good vineyards. At Cahors, they make white, rose-coloured, red, and black wines.

The white wines are made in the usual way; the grapes are trodden and pressed immediately after the vintage, and the must fermented in the cask. The wine is racked twice a month, until it is perfectly clear.

The rose-coloured wines are made with the weakest white wines, poured upon the murk of the black wines, which are never pressed. They gain colour and strength by this operation, but are not in great esteem.

The red wines are made with the grape named *rougets*, *mauzais noirs*, and the common *auxerrois*, with the green stalk.

The black wines are manufactured from the fine *auxerrois*, or *pied de perdrix* grape, so called because its stalk is red. The grapes are plucked from the stems. After they have been well trodden, the murk and skins of the grapes are either partly or wholly, according to the fancy of the grower, set over the fire in large boilers, and boiled for some time. After this, the contents are poured into a vat, with the other part of the juice which has not undergone the same operation. They commonly remain eight or ten days in the vat, when they are racked. They do not usually press the murk. These wines are most commonly treated by mixing them with one-third of a liquor known by the name of *rogome*, and are said to be *rogomés*. *Rogome* is the must of the *auxerrois* grape, made to boil for five or six minutes. They afterwards throw into it the highest proof spirit of wine, in the proportion of one hectolitre to four of the must, and it is then put in the cask. It is racked at the expiration of two or three months. Much of this liquor is sent to Bordeaux, to strengthen or colour light wines. It is sometimes mingled with aromatics, to make a common ratifia, and sometimes it is sold pure. The price is one hundred francs the hectolitre. The wines treated with *rogome—vins rogomés*, are forty francs. The black wines in their natural body are sold at thirty-four francs, and the ordinary red at sixteen. The white wines bring from thirteen to fourteen francs. The rose-coloured eleven francs the hectolitre.

The Cahors wines carry little perfume, but they are strong in body. They are bottled at two or three years old, though they will keep a long time in wood; the white

and rose eight or ten years, though generally consumed after one in the country. The red and black wines will keep twenty or thirty years in wood, and forty or fifty in bottle. In commerce the wines of Cahors increase ten per cent. in value each year they are kept. They are racked twice every year while in wood, in March and September, and fined twice before bottling. The best wines are grown on the hills, and in the communes of St. Géry, Vers, Savangac, and Cahors. The heights called *Causses* in the language of the country, as Causses de St. Henri, de Cournoux, afford good wines. At Figeac the price of the wines depends less on their quality than on the proximity of the outlet, and the inferior sorts often bring, in consequence, the higher price.

In the Lot and Garonne the wine of Rocal, so called from the pebbly ground on which it is grown, is a generous wine, of a fine colour and agreeable taste. It improves by age; is generally bottled at two, and will keep twenty years. Moirax is a tolerably good wine, but inferior to Rocal. The St. Colombe is indifferent, and apt to turn sour. The white wine of Aiguillon and Porte St. Marie is sweet and luscious; it becomes dry and sparkling by sea or land transport, when left on the lees, and poured off carefully. Among numerous other wines in this department, are those of Clairac and Castelmoron, which keep well in wood for six years, augmenting ten francs per hectolitre in value every year. At Villeneuve the best black wines produced at Thésac, Libos, Fumel, and Péricard, bring for exportation, on an average, thirty francs. They are of marked colour and body, and are produced from a grape named *côte-rouge*, which gives the wine so deep a colour, that one-fifth, mixed with four-fifths of white wine, suffices to give the latter a colour strong enough for ordinary demands. The black wines of this department being those of the first quality, are sold ready for bottling at eighty-eight francs. They are usually kept five years in wood. The most noted growths are those of Frontig-

nat, Grimard, and Carabons, near Villeneuve, and Thésac and Péricard, near Fumel.

The department of the Moselle produces two qualities of wine, principally in the arrondissement of Metz, and close to that city their price is about eighteen francs. The dismemberment of the department of the Rhine and Moselle from France, gave to Germany the greater part of the vines grown on the latter river. In the neighbouring department of the Meuse, anciently part of Lorraine, 546,523 hectolitres are made. The hills planted with the *pineau noir*, which are sheltered from the north, and open to the rising sun and the south, produce the wines of the first class, which they denominate *tête de cuvée*, being grown in vineyards having the most favourable exposure. These wines amount to about ten thousand hectolitres, at fifty-five francs.

The wines of the second class are the produce of the same plant, with a southern aspect, having the setting sun on the reverse of hills of small slope, and trifling elevation, or on flat places with a good aspect. There are about fifteen thousand hectolitres of these wines grown, at forty-two francs.

The third and fourth classes bring, respectively, thirty and nineteen francs the hectolitre, and are made from different fruit. The grape called *vert-plant* being then mingled with the *pineau noir*.

The best vineyards are those of Bar and Bussy. At Bar they make what is called *vin gris*, and also some rose-coloured wine. When they find that the wines clear quickly, they rack them in February, but in no case leave them without racking longer than March. The second racking takes place immediately before or after the vine has flowered. When the grape begins to ripen, as well as when it shoots and flowers, insensible fermentation is observed to trouble it, and sometimes it becomes oily. In either case it must be racked a third time, for if neglected the wine deteriorates, and a larger part of red hard wine

is required to recover it. After the first season it is racked but once a year, and always when it is moved or sent away. It is only fined when not found, on bottling, sufficiently clear. At the age of two or three years, if observed to weaken, they put into every cask a bucket or two of a stronger quality, from a posterior vintage. Sometimes they pour a measure or two of red wine of Tavel, or St. Gilles, into their grey or rose-coloured wines. Merchants often preserve the wines of Bar in full quality by mixing with them a little of the Rhone wine, of Bordeaux, or Burgundy, which agrees well with their constitution. These wines will not keep more than three years in wood, and five or six in bottle.

The department of the Meurthe, part of old Lorraine, produces an abundance of wine, no less than 688,358 hectolitres, at $50{\cdot}64\frac{1}{6}$ per hectare. The quantity of juice given out by the vine here is enormously great. At Nancy it amounts to fifty-five hectolitres per hectare. At Toul from forty-four to forty-five. At Château-Salins it is often a hundred. This is almost incredible, and yet within the truth, the mean produce being oftener a hundred and twenty than a hundred for each hectare. The curate of Achain, a correspondent of the French board of Agriculture, declares that he has often obtained two hundred hectolitres, and in the worst years never less than fifty.

There are three classes of wine in this department, of which much is made from the *pineau* plant alone. The first is light and agreeable, and brings twenty-five francs the hectolitre. The second is from a mixture of different plants, of good quality. The third is made from the grapes called *grosse race*, and is a hard, acid, tartrous wine, averaging only twelve francs the hectolitre. These wines are both red and white, of which the best are produced at Buley, in the arrondissement of Toul. There is near Nancy a hill called *la Côte des chanoines*, which is superior to the rest, rather owing to the goodness of the plant than the aspect of the vineyard.

The wines grown at Toul will keep ten years in wood, and will bear from twelve to twenty in bottle, if bottled at three years old. The ordinary wines are kept four or five years in wood, and are submitted to what is called there *traversage*, or racking every year after the two first, when a great part of new wine is mixed with them, or else they would deteriorate.

There is a vine common at Château Salins, called *liverdun*, a variety, it is said, of the *pineau*. It produces a wine which will keep well for ten years, and bear a long transportation. Its bearing is enormous. If its buds are injured by the spring frosts, it is observed to put them forth anew, and yet the grape reaches maturity in due time.

The department of the Maine and Loire, formerly Anjou, produces some tolerable wines. Those of Saumur are in esteem. Except at Saumur, all the wines made in the department are white wines. The best are only kept a year in wood, and will keep twenty-five or thirty years in bottle. If intended to be effervescing, they are bottled in the month of February or March, and placed upright on their bottoms for a year. They are made from the *pineau* plant, and the vintage is protracted as late as possible, so as to have the skins of the grapes shrivelled. The red wines of Anjou, though little known abroad, are some of the best in France.

The white wines are superior to the red; they are made from the same plant as the red, and are of two qualities, hill and plain wines, which are subdivided into two divisions, called, after the mode of cutting the vines, "short wood" and "long wood." The short wood is that on which two or three buds are left on each of its two branches. It produces better wine than that which is called long wood, or where a long branch is left with eight or ten buds. In the valley of Lanthion the vines are planted in rows, at the distance of four, six, or eight metres from each other; and corn or vegetables are grown be-

tween. This wine, as may be supposed, is of the worst quality. The price of the best is from thirty to forty francs the hectolitre. The best wine made near Angers is grown on the schistous hills of Layon, and brings about twenty-seven francs.

The Haut Rhin, formerly part of Alsace, produces 347,335 hectolitres of wine. The first is classed under the generic title of *gentil*, whether red or white, and is designated as *rouge gentil*, *vin gentil blanc*, &c., the plant which produces it being that named the *gentil*. The second classes of wine are produced from the plants named the *riesling*, and *bourgeois*. The other plants are the *tockai*, *chasselas croquant*, *chasselas commun*, and *chasselas rouge*. With these latter they make a *vin de paille*, in seasons when the fruit attains a sufficient maturity, for which purpose they leave the grapes on the vine until the first frost, when they gather them, and place them on the straw, where they remain several months in a dry airy situation. They are visited daily to take away any spoiled grapes. When they are sufficiently dried they are pressed. The wine of the first pressing is of a superior quality. The second and third are kept separate, the quality of the wine deteriorating, as usual, until the murk is exhausted. The wine is placed in wood until the sale is effected, when it is delivered in bottles, which sell from five to seven francs each. The other wines, denominated *gentils*, sell from eighteen to twenty francs the hectolitre. The white wines are rarely bottled for keeping; the reds reach perfection in two or three years. After four years they lose something of their strength, but will keep well in bottle, and be very agreeable drinking at twenty years old. The white *gentil* reaches perfection in ten years, and will keep good a hundred. These wines are kept in casks of eight hectolitres or more, which are sold full. The red wine is racked twice a year; the white three times the first year, and twice a year afterwards. When the deposition ceases, the wine is not racked more than once in four or five years.

Some growers leave the wine on the lees closed up in the cask for three years together, when not wanted for immediate sale, and do nothing more than mind the ullage monthly. In three years they rack, and keep it until wanted.

At Altkirch white wines are made, which sell in plentiful seasons at from seven to twelve francs, but in those of scarcity from thirty to fifty francs the hectolitre. At Belfort the white wine is divided into three classes, namely, that of Rangen, of which there are only twenty hectares grown, next of middling, and lastly of common wines. The Rangen brings sixty francs the hectolitre; the middling thirty-six; and the common twenty. The vines of Rangen are from the *gentil* plant. This wine, filtered until it is limpid, is pleasant drinking, very heady, and produces a singular effect on those who go beyond certain limits in the quantity taken. While seated at the table in a room, no inconvenience is perceivable from its effects, but on going into the open air, the limbs are attacked so as to render any movement of them impossible, and yet the mind is not at all altered, as in ordinary cases of intoxication. A small quantity of *vin de paille* is made at Belfort.

In some families in this district an effervescing wine is made by a process used no where else. The first must is taken from the press, and filtered until it is as clear as possible; it is then put at once into jars or bottles, corked and wired. The wine ferments in the bottles, and many of them break, but they are content to preserve half. The wine runs out of the bottle clear to the last drop on drinking.

At Strasburgh, in the neighbouring department of the Bas Rhin, the best red wines are those of Wolxheim and Neuwillers, not far from the former place. The white wines are ranked in quality as follows:—Riesling, Muscadine, Kléber, or Klebner, and common.

Riesling wine is distinguished by a particular bouquet, by strength, and durability. It will keep a century. It

is diuretic and cold. The best is that of Molsheim and Wolxheim; that of Molsheim is best known by the denomination of *Finckenwen.*

The muscadine has but a weak flavour of the southern muscadine; it is as cold and diuretic as the Riesling.

The Klebner is sweet, and of an agreeable taste. The first quality is grown at Heiligenstein, as well as at Wolxheim.

These wines are rarely pure. Too many species of grapes are mingled in the vintage, so that the wines bear their prices as the superior species of fruit are more or less abundant in them. The Riesling wine at Strasburgh will keep a hundred years, as before stated; but that grown at Schelestadt will only keep fifty, while in Wissemberg it reaches a century, as well as at Strasburgh. At Saverne, not far away, it will not keep good more than two or three years, though the same wine in every respect, as far as growth and treatment are concerned. These wines on an average fetch about eighteen francs the hectolitre. They are drawn off in March and October the first year. They sulphur the casks into which they first rack them, a step necessary for the preservation of the wine in a good condition. They rack them annually, and if it happens that they become ropy, they repeat it every time the disease begins to subside. When the wines are five years old, they make up any defects in quantity with wine of the last vintage, which has been once racked at least. The red wines made there are poor, and will turn sour from the slightest cause. A storm, a bad cellar, or a particular place in an ordinary one, or the introduction of a cock into the cask, will often spoil them.

In the department of the Cher, formerly Berri, a white wine is grown called *moustille;* it ranks with the second growths of Chablis in quality.

In the department of Corrèze, formerly Bas Limousin, wine of the value of four millions of francs is grown. The most noted vineyards are those of Saillant, Danzenac,

Allassac, and Varez, situated in the arrondissement of Brives. The great merit in the wines of the Corrèze is their capacity of enduring well and improving by age. Whether in wood or bottle they ameliorate constantly as they grow old. A piece of wine belonging to M. de St. Priest, of Tulle, grown at Granne, near that place, was opened, having been in wood twenty-four years without being racked or fined, and was found delicious in quality, and perfectly good. When exported to the north particularly, these wines increase in excellence.

In the canton of Argentac a fine, delicate, heady, white wine is made, sharp to the taste, which possesses most of the qualities of an effervescing wine, without being so entirely. The fruit is carefully selected from the ripest, and gathered when the weather is warm and dry. The stems are thrown aside, as well as the grapes, when either unripe or spoiled. They are pressed, fermented in the barrel, and bottled in March, taking the precaution not to cork the bottles for five or six days after they are filled.

Two species of *vin de paille* of different characters are made here. The grapes are gathered and treated as above-mentioned; they are then spread on straw in a dry place until the month of December, when they are judged sufficiently shrunk. They are then separated from the stems, and suffered to ferment whole in a tun with the upper end out, in a place sheltered from cold. When they have fermented some time in this way, they are crushed as uniformly as possible. A new fermentation takes place, and when the head formed by the skins begins to be depressed, the wine is racked by a cock fixed near the bottom of the tun. Below the level of the cock straw is placed, which serves as a filter, the wine runs through limpid, and remarkably saccharine. It is put into a tun, where the fermentation continues. In the upper part of the tun one or two little holes are made, to allow the escape of the carbonic acid gas. This wine when bottled is sparkling, luscious, and very agreeable to the palate.

For the other species of straw wine they choose the grapes from the ripest of all kinds indiscriminately, and dry them for two months on straw. They then press them, stems and all, and the juice is fermented in barrels, racked in March, and bottled in two years afterwards. This wine in many respects, particularly in colour and taste, resembles Malaga.

The department of the Indre produces a small quantity of tolerable wine, of the common class, at about sixteen francs the hectolitre. From the department of the Indre and Loire wines of middling quality are exported to Belgium; the quantity grown is considerable. Near Tours the wines are divided into three classes, namely, what is called *rouge noble*, *vin du Cher*, and *rouge commun*. The most esteemed growths are those of Joué, about a league from Tours; St. Cyr sur Loire, about half a league west of that city; and St. Avertin, a league to the south-west; Bléré, five leagues, and Ballan two, have some merit, but those of Joué are the finest. The price of the wine of Joué varies as to the first quality from twenty to forty-five francs the hectolitre. The mean price may be from thirty to thirty-five francs. The vin du Cher varies from twenty to forty. These wines will keep three or four years in wood, and ten or twelve in bottle, especially when they are mingled in the vat with a grape called *caux* or *cos*, common on the banks of the Cher. This grape imparts colour and body to the wine.

The white wines of the Indre and Loire are a little under the red in price.

The department of the Jura produces some tolerable wines, which are frequently exported into Switzerland, Savoy, Germany, and even Russia. At Lons le Saulnier red and dry white wines are made, as well as *vins de paille*, white wines *de garde*, and effervescing wines, white, grey, and rose-coloured.

The best white wines *de garde* are made at Château-Châlons; the effervescing at Etoile and Quintigny. The

best red at Château-Châlons, Ménetru, Frontenay, and Blandans.

The straw wines, or *vins de paille*, are luscious and stomachic, resembling a little the wines of Spain. The white wines *de garde* resemble much the wines of the Rhine. The effervescing white wines are good, though not equal to Champagne. The reds are generous, but light. The wines *de garde*, as well as the straw wines, are only drank when old. The price of the former is three francs the litre; of the latter, four or five. The effervescing white wines are from eighty centimes to a franc. The red wines of the first growth in wood, at three or four years old, from fifty to sixty-seven francs the hectolitre.

The white wines *de garde*, or wines for keeping, as it may be rendered, are made of the best white grapes, from the must of a single pressure. The must is put up in iron-bound casks, very strong, as it comes from the press. The bung is made as close as possible, and they cover it with linen soaked in oil, over which are placed fine ashes, well pressed down. The wine is racked twice at the end of eight or ten months from the vintage. After this the cask is left without closing or filling up for ten or twelve years, when the wine is bottled, and improves the longer it is kept.

At Arsures some excellent red wine is made, which brings forty or fifty francs the hectolitre. The wines of Molamboz and Vadans are good. Those of Arbois bring from twenty-four to thirty francs. The wines for which this department is most noted are straw, yellow, white, and clairet.

The yellow wine is only made at Arbois, and brings from three to six francs the bottle, the price varying in proportion to the age and vintage. It is the same with the straw wines in bottle. In wood the latter bring from three to four hundred francs the hectolitre. That of Poligny is the best.

The white wines are made every where. The best,

however, are grown at Arbois, Pupillin, and Montigny, and sell from one franc to one franc and a half the bottle in ordinary years. The price of the clairets is nearly the same; the best are made at Poligny. Those of Arbois are more fiery, and not so agreeable to the palate.

The *vin de paille* is made at Poligny, of the best grapes, perfectly ripe, and gathered with care. They are placed on planks, or suspended by twine, in a room where the north wind cannot enter. Three or four months after, when the fruit has lost half its bulk by desiccation, it is pressed. The must is commonly left six months in the cask fermenting. When the fermentation is complete, the wine is racked to clear it of the grosser lees. It is barrelled up, and left alone for five or six years. It is then racked again, and fined. This wine is sweet and luscious, and will keep a long time. The older it becomes, the yellower is its colour. It is much sought after in France, and will bear carriage well. It has some analogy with Tokai in its qualities, getting thick by age.

An effervescing or sparkling wine is made at Arbois, which has been famous for a very long time. After the grapes have been treated as usual, the must is placed in a vat for twenty-four, thirty-six, or forty-eight hours, according to the temperature at the time, the object being to let it settle, and get rid of impurities, which rise to the surface in the form of a crust. This crust is suffered to get as thick as possible before the fermentation is so far advanced as to be visible, because if it were, there would not be time to rack off the wine in a clear state. The maker always passes the night watching it, so as to catch the favourable moment, which is indicated by little bubbles of carbonic acid gas appearing on the surface. Having racked it off once, the must is placed in a vat until a second crust or scum forms, when it is again racked, and this is repeated two or three times, until the must is perfectly limpid. The wine is then put into casks, which are carefully kept full. The cellar is visited several times in the day, to see that

the bung is safe; but if the wine has started, the cask is carefully filled up with the same sort of wine again. When the fermentation has subsided, the cask is closed from the air. The wine is racked again several times in January and February. In March it is fined and bottled during clear weather. The corks are tightly driven, fastened with packthread, and sealed. The bottles are then removed to a cellar of the proper temperature.

Some keep their wine in wood for ten years and more, and thus obtain yellow wine *(vin jaune)*. It will last a long while, some of the growers offering it forty years old. The clairet is made in the same way as the white wine. Poligny is noted for the best sort. It is very agreeable, especially when mingled with water, and is taken as a refreshing draught by those who live where it is made. Clairet here means the same kind of wine which at Lons le Saulnier is called *rosé*, or rose-coloured. It is made by strongly pressing the murk of the red grape, having first extracted some of the must by a light pressure. It is then treated in the same manner as the effervescing wine.

The white wines are produced by the *morillon*, *bourguignon*, *meslier*, *savagnin jaune*, or *moulan* grape.

The department of the Landes, remarkable for containing vast plains of sand formed of those on the ocean shore impelled by the winds over the fertile soil, contains a considerable vineyard tract. Some of the wines are called Cape Breton wines, being produced at that place. The vines are planted on the sandy downs which border the Gulf of Gascony, in small squares, surrounded by palisades of fir, to prevent the progress of the sand; but, notwithstanding this defence, they are soon buried so deeply beneath it, that, at the end of every ten years, they are obliged to be transplanted to another part of the downs. In Cornwall, bordering St. George's Channel, they plant rushes, for the purpose of stopping the like encroachments of the sands on vegetation, and with very good effect.

The wines of Landes are generally made from the white

piquepoint plant. The red are light of colour, and have a tartness which is very disagreeable. The white wine is better. In the canton of Arjuzanx there is a vineyard of about thirty hectares, which produces a wine like Bordeaux in *bouquet* and colour. The wine of tolerable quality in this department is very small in quantity. The greater part is bad, and finds no favour either with Frenchmen or foreigners.

The Loire and Cher boasts some tolerable white wines; one of them, grown in the Vendômois, at Prépatour, called *vin de Henri IV.*, is of very good quality; it is a dry wine.

The department of the Loire produces some good wines, as the St. Michael, which sells at seventy francs the hectolitre the first year; one hundred and twenty the second, and one hundred and fifty the third. The red wines of that place all fetch nearly the same prices. They do not gather the grape until it has begun to wither on the stem. The first pressure is called the "flower," and is the wine of the first quality. In this department they rack the wine as soon as the fermentation has sensibly disappeared, which is in seven or eight days; two or three times, in eight days more, it is racked again, and it is then ready to be delivered to the purchaser. That which is kept in the grower's hands is racked four times before the first frosts, and then fined with fish glue twice in the space of fifteen days, and drawn off each time with the utmost care. The earlier it is bottled afterwards the better is the wine.

The department of Allier, formerly the Bourbonnaise and part of Nivernais, produces some low priced wines. The best red is about eighteen francs the hectolitre, and capable of preservation for ten years in bottle. At Moulins they make a species called *vin fou*, or mad wine, or rather, "drunkard's wine." They fill a small strong-bound cask, having no bung, with must; this they put into another cask, and plunge it into the vat, from which it is not withdrawn until the fermentation ceases. This wine is very intoxicating. Others, to obtain a stronger wine than

usual, roll a tun into the open air during a severe frost, and taking out the head, having set the cask on its end, it becomes frozen to a considerable depth in the upper part. The lower portion of the liquid is then racked off and bottled. This wine will keep long, and is very strong in quality. (See Appendix, No. XII.)

At Gannat they make white wine with the red grape. They gather the grape when wet with dew, immediately press it, and ferment the must in casks. The wine thus manufactured is as clear as the finest rock water, heady, and capable of effervescence when put into bottles in the month of March following the vintage.

A *vin gris*, a grey or rather brown wine, is made here by leaving the must to ferment for forty-eight hours. A rose-coloured wine is also manufactured by racking it after three or four days' fermentation in the vat. This last wine is excellent, of a very agreeable taste, but what is singular, has not yet become an article of commerce.

At Mées, in the department of the Basses Alps, there is some good red wine made, which at ten years old sells for one franc and a half the bottle, and at twenty years old for three francs. These wines are kept by the inhabitants in demi-jeans for ten or fifteen years. Malijay, Oraison, Riez, Valensole, and Chabrières, are the principal vineyards.

One of the most extensive vine districts in France, if quantity rather than quality be considered, is the department of the Seine and Oise. It contains 16,298 hectares of vines, producing 849,718 hectolitres of wine, at 52·13⅝ per hectare, valued at 14,775,880 francs. These wines are of very middling quality, even considered as ordinary wines of the country. In the fifteenth century Mantes was noted for its wine being among the best in France. It fell into disrepute about a century ago, on the grubbing up of the vineyard of the Celestins. The wine is said to have resembled Bordeaux. It was exported to England

and Holland. There remains nothing commendable in the qualities of these wines at present; but the consumption in the capital makes the average price sixteen francs the hectolitre. In the department of the Oise also some ordinary meagre wines are grown.

The wines of Corsica amount only to 310,730 hectolitres, at 31·12 per hectare, in value about 4,660,950 francs. The portion exported goes for the most part to Leghorn. The vines are good; but care and attention seem wanting in manufacturing the wine. Only 30,000 hectolitres are exported. The most noted growths are those of Ajaccio, Bastia, Cape Corsica, Corte, Verdese, Serra, and St. Lucia. The mean price of the hectolitre is but fifteen francs.

A very excellent variety of grape is grown in Corsica, called the *sciaccarello*. At Sartena a wine is made, called by the natives *particolore*. It is of a fine red, of prime quality, a delicious flavour, and is stomachic. The best grapes are chosen in situations most exposed to the sun's rays. The stems of the bunches are twisted eight days before the vintage; the bunches are then gathered, and kept eight days more on a floor, when the grapes are taken from the stems and pressed. The must is placed in a small tun for fermentation, and the wine is racked into smaller barrels or demi-jeans. It is not fit to drink for two years, before which time it would be too sweet. It may be kept twenty years, and in gaining age it acquires strength, and an exquisite bouquet.

All the Corsican wines are exported from Cape Corsica. The wines destined for exportation are generally mingled with boiled wine. The must is put into boilers, and reduced a third or fourth part in quantity, and to three barrels of wine one of boiled must is added. This mixture gives it the colour and taste of Malaga, and it is frequently sold for such to the merchants of the north, when it reaches Leghorn. This kind of wine is not drank in

Corsica; it sells for fifty or sixty francs the hectolitre. It is said that sometimes from boiling the must too long a disagreeable taste is imparted to the wine, and that the oxide of the copper boilers has been perceived in the taste. The French are attempting to amend the practice of the Corsicans in this respect.



Wine Skins of La Mancha.

CHAPTER VI.

WINES OF SPAIN, AND THE CANARIES.

GENERAL REMARKS—WINES EXPORTED—LA MANCHA, VAL DE PEÑAS—WINES OF CATALONIA—OF VALENCIA—OF ARRAGON AND NAVARRE—ANDALUSIAN WINES, MALAGA, XERES, &c.—WINES OF MINORCA, MAJORCA, AND THE CANARIES.

As Spain succeeds France geographically in the direction of the warm South, in like manner it follows that country in the excellence of its vinous productions. The wines of Spain deservedly rank high in the estimation of foreigners. This commendation is not founded upon the value in which the Spanish sherries are held in England; it would be unjust to form an opinion of the wines of Spain from the general taste of a people who think the adulterated and fiery portion of the wines of Portugal the best product of the grape: it is the judgment of the first connoisseurs in wine, not only in England, but all over the world. If

France rank before Spain in this respect, it is because science has led the way to excellence, and has enabled the French to attain, by delicacy of management, by art and labour, that which nature had well nigh accorded to Spain without such appliances. Superstition and ignorance may triumph over a simple-hearted people, which the Spanish peasantry and farmers undoubtedly are, but nature vindicates herself in her productions, even in the land of priestly arrogance, and intellectual prostration.

The wines of Spain are grown on a soil highly congenial to the culture of the vine, for the most part upon chalk, called in the country *albariza*, of which carbonate of lime forms two-thirds, and often three-fourths. The sun ripens the grape without those hazards from chill and humidity to which, in a more northern climate, the vintage is constantly exposed. Hence the crop rarely fails, though in the southern parts of the country the heat is so intense in summer, that they are obliged to irrigate the vines. From north to south, sites, soils, and exposures of the happiest kind, cover the face of the country.

With every disadvantage in the process of making, there are both red and white wines in Spain of surpassing excellence. The rude treatment of the grape at the vintage has not made the traveller insensible to this truth. The treatment is somewhat changed at Malaga and Xeres, where, from the calls of commerce, improved methods of management have been introduced by foreign interests. The wines commonly drunk by the people of Spain are not the white luscious wines, nor the dry Xeres, but very excellent red wines, often too much deteriorated, it is true, by the carelessness of the manufacturer. The sweet wines of the south, so highly esteemed there, are only taken in small quantities at a time; they are offered at the rate of a glass after each meal, rarely more. The red are drank in the houses of the better class in a state that may give some idea of their excellent qualities, untainted by the *odre*, or skin, which the lack of staves for barrels, poverty, or per-

haps the want of commercial profit, obliges the peasantry to substitute. The white wines grown near the coasts are not liable to this taint, the foreign demand removing the evil. The best red wines grown far in the interior, are generally kept in skins, as being more facile of carriage. They are often found so defiled, even in the tavern, with the pitchy taste, and the filth of the uncleansed skin, to say nothing of the deposit owing to the coarse conduct of the vintage, that they cannot be drunk by a foreigner at all.

From Catalonia some thousand pipes are annually sent to England, and twelve thousand are exported from Valencia and Malaga. About twelve thousand tuns were imported into Great Britain alone from Spain in 1808, which is less than in 1700, when the amount was 13,649. Holland and the north of Europe have, in some seasons, taken twenty thousand pipes of all kinds. The home consumption at present it is not easy to ascertain; about five thousand hogsheads are annually consumed in Madrid. Three hundred and fifty thousand pipes have, in some years, been exported from the country, before the colonies of Spain in America were lost to her.

The province of La Mancha is chiefly a wine district, and there the justly celebrated wine called Val de Peñas is made. This is a red wine, of excellent body, perhaps with as much as Port before it is made fiery with brandy. In the hands of Frenchmen it would be found to equal in strength, flavour, and body, the best southern growths. The vineyards are close to Manzanares, a town almost in ruins, in which the Duke of San Carlos, upon whose estates the wine is made, keeps extensive cellars, where it may be tasted in perfection. It is a wine which requires age to perfect, and then it is equal to any red wine in the world, for every quality save, perhaps, the delicacy which distinguishes the higher class of Burgundy. It is grown upon a rocky or stony soil, as *Val de Peñas*, or "Valley of Stones," indicates. The higher orders of the inhabitants of the Castiles rate it very highly; but no idea can be

formed of this wine from what is drank at Madrid. The vines employ all the inhabitants of the district, where the wages of the labourer are only about sevenpence a day. This wine is rarely transported, except in the skin, and therefore can only be drank out of wood upon the spot. It is rich and racy, and bears a price of only three pounds ten shillings per pipe from the grower. Six thousand skins have been seen in the store of one of the growers, each containing ten arrobas, or about forty gallons. English merchants going with wine staves to La Mancha, just before the vintage, might secure on speculation some of the finest wines on earth, well adapted to the English taste.

In Catalonia, where the soil is propitious, the plains are carefully cultivated, even the highest cliffs which are accessible are planted with vines. Wherever there is a slip or fall of the cliff leaving a few feet of surface, a mere ledge, to which there is no other mode of access than being let down by a rope, even there the vine is set. The fondness of the Spaniards for this branch of husbandry is so strong as to make them in some places neglect every other species of cultivation; thus habituated are they to that which long usage has made with them a second nature. About Rosas the hill sides are planted in double rows, and corn sown in the intervals, until the hills become too steep to admit corn cultivation, and the thin soil, consisting of broken granite, has hardly earth enough to give them root. At Figueras, the country is cultivated with great care, even to the Pyrennees, and on their bases themselves, and the vines are carefully attended. Figueras wine is well known as a mixture to give lighter wines body. The red wines of this province are not remarkable for quality. The Malvasia made at Sitges is considered very good, but the manufacture of all kinds is negligent beyond example. They have in this province a good *rancio*. The exportation of wine from Catalonia, though considerable, has been chiefly for mingling with others of less strength. From

Tarragona five thousand pipes of wine, and four hundred of good brandy, are annually shipped off. These wines are of tolerable body, but manufactured in the careless mode of the country. The grapes are used without selection, and no pains are taken in the cellar. Yet the wine finds a tolerable market. Borja produces a luscious white wine. The country about Tarragona, on the road to Barcelona, is almost wholly a wine country. Mataro has some excellent vines, but the wine as usual is made in a negligent manner, and neither fined nor racked.

From Valencia a considerable quantity of Beni Carlos wine is exported to France, expressly to mingle with claret for England. It comes from a town of that name, to the eastward of the city of Valencia. There is also a wine made at Beni Carlos, of tolerable quality, consumed upon the spot. The wines of La Torre, Segorbe, and Murviedro, are generous and good; that of the latter place is strong, and the best part of it is on this account distilled into brandy, which was formerly shipped to America. The Beni Carlos wines are often bought up to mix with Port in the English market, and are sent to England for that purpose. Much *vino de racion*, or common wine, is grown in this province.

At Alicant there is an excellent red wine, which becomes of the very first order by age; it is made from grapes of two or three sorts, mingled together. Some dry white is also made there, but the town is most noted for *vino tinto*, or red wine, strong and sweet, of which however a very small quantity indeed is now exported, the commerce of the place having gone to decay. Like Cyprus wine, it is said to possess healing qualities, and to cleanse wounds. When old it is called Fondellol. It comes from the tintilla plant. Near Alicant the irrigation of the vines has been carried on upon a large scale. The reservoirs are a grand undertaking, of great cost and much labour. El Pantano, about twelve miles from Alicant, is a tank, formed by damming up a valley with an embankment, two hundred

feet high, and forty thick. This supplies water for an entire year. Not far away from Alicant there is another of these reservoirs, having a wall sixty feet high, and broad enough for three or four carriages to travel upon. The cultivation of the vine in the South is therefore an expensive work, from the climate being over dry. It has been calculated that three gallons and an eighth of wine cost from the press fourteen pence, English, for labour alone in this part of Spain. Vinaroz, Santo Domingo, Perales, and Segorbe, produce tolerable red wines. The wines grown near Villena are almost all distilled into brandy.

In Arragon there are tolerable wines. The best are a *vino tinto*, and that of Cariñena and the Hospital from the vine which the French call Grenache. In Biscay, at Chacoli, a wine of the second class, a *vino brozno*, or austere and harsh wine, is produced in great quantity. The best is made at Vittoria, and called Pedro Ximenes. It is manufactured of all kinds of grapes, mingled together, and the price is settled by the police. Five or six different kinds of vines are engrafted in Biscay on one stock, which must render the wine of very dubious character. It smacks of the skin, and sells for about threepence the bottle. Fuençaral, not far from Madrid, produces a good wine, which is mostly consumed in the neighbourhood.

In Navarre, Peralta is remarked for a good dessert wine, a *rancio*, from the same cause as the French wines so called, namely, long keeping. Near Pampeluna there is a good wine or *liqueur* made. In Leon the best wines are found at Medina del Campo; in old Castile, at Rioxa, near Terra del Campo, and at Carbezon, not far from Valladolid. Murcia principally produces *vins de liqueur*. Gallicia has a second growth, for home consumption, called Ribadavia. The details respecting the management of the wines in the interior of Spain are very scanty, but the same bad conduct injures them all, and the pitched hog-skin of the *vinatero*, or wine-seller, generally completes what the carelessness of the grower began. With so many

evils in such a nice article as wine, it is rather to be wondered how any Spanish wine is not only palatable, but good—how the proverb of the country, "Pregonar vino y vender vinagre," "To cry wine, and sell vinegar," is not more frequently exemplified.

To return to the wines of the coast. It is in the beautiful and fertile province of Andalusia that the wines most valued by foreigners are made, and the favourite species of grape is the Pedro Ximenes. The mountains round Malaga are clothed to the summits with vines, one half of the plants being of the foregoing species. No less than ten thousand presses are said to be kept at work during the vintage in that and the bordering districts. No labour is spared on the vineyards; for here the benefits of commerce, in spite of all obstacles, have made their way, and the wine is made in a better manner than where this active principle of improvement is unfelt. The most celebrated wines of this province are white; but there is a red wine, of a sweet, yet tart taste, called Tinto di Rota; it is of the richer class, and is consumed by the inhabitants. There is also a wine flavoured with cherries, called Guindre, which on that account carries the name. As well as the preceding class, this is consumed at home. The common wine, or *vin du pays*, is very palatable, and is called Manzinilla.

They have a custom in some parts of the country of putting roasted pears into wine, to improve it in drinking, fancying that it becomes better; whence the saying, "El vino de las peras dalo a quien bien quiéras," "Give the wine of pears to him you love," because the wine is supposed to be made more agreeable and wholesome by the addition.

The mountain wines of Malaga have long been well known out of Spain. The vines cover the hills from the valley depths to the summits, and the little habitations of the dressers peep out romantically on the declivities among them. Wines both sweet and luscious are made in the districts around the city. There are also several kinds of

dry wine. The Malaga, usually so called, is always mingled with a proportion of wine burned a little in the boiling, to impart its peculiar taste. It is a powerful wine, long in high repute. This wine is from a white grape, and contains a very large proportion of alcohol. The mountain wines are pressed from the grape somewhat riper than for the preceding kind. The "lagrimas" wine, which is made from the droppings of very ripe grapes, suspended for the purpose, and not undergoing pressure, is a very luscious wine, from the large white Muscatel grape. There is the Pedro Ximenes, a wine named from the grape so common in most parts of Spain, but of excellent quality. The dry wines are generally pressed from fruit not so mature in ripeness as the sweet. The Malaga Xeres comes very near to some of the real sherries in taste, and is only to be distinguished by good judges from their secondary growths. As this wine is much lower in price, it replaces in the foreign market some of the lower priced sherries. It is an unmingled wine of better quality, which they are endeavouring to improve further. This is often shipped for England as sherry, and forms a class of our cheap sherries. Still more is shipped off to America. Very little old Mountain or Malaga sweet wine is grown at present.

The vineyards around Malaga alone are estimated to produce annually between thirty and forty thousand butts of wine, of which nearly twenty-seven thousand are exported. The prices vary from thirty-five dollars to one hundred and seventy a butt. The Americas now import the greatest part of these wines. As much as two hundred pounds sterling has been paid for a cask of very old wine of prime quality.

The price of labour and the expense of the vineyards are much less at Malaga than at Xeres, where the sherry wine is grown. Most of the vines flourish in about eighteen inches of a rich loam or mould upon a blue shaly substratum, which scales up, and mingling with the mould, imparts to

it a looseness and free quality allied to the rocky or gravelly sites, found to be so congenial to the vine in other countries. It is not, therefore, as calcareous as the soil in the vicinity of Xeres. Close to Malaga, however, limestone intermingles with the schist. The vineyards are many of them situated at a great height above the sea, where the earth around the vines must be carefully secured. In the treatment of the vine they are by no means as careful as at Xeres; indeed, it is often very slovenly. Yet every spot is cultivated, although the country is very uneven. Manure is rarely used at all. The varieties of vine are about twenty. In this fine climate there are three gatherings of grapes in the year. The first takes place in June, and furnishes the Muscatel raisins, the bloom, and the lexias, which are exported as such. The Larga grape yields the bloom raisins. The vintage grapes are gathered in September and October. It is wonderful to view the fruitfulness of the soil in this district. In 1829 eight millions of pounds of Muscatel and bloom raisins, and thirty thousand arrobas of bloom and lexias in casks, were exported from Malaga, the produce of one season, with no less than twenty thousand jars of grapes, yet the quantity of wine made was not diminished; it not being less than thirty-five thousand butts. The fine climate renders the vintage in this part of Spain not only rich in produce, but certain in crop. The exports of fruit and wine to England from Malaga are on the decrease, but to America the reverse. The Muscatel grape cannot be cultivated more than four leagues from the coast.

The district called the Axarquia is that in which these wines are grown. Though mountainous, wherever it is practicable the vines are planted symmetrically, about eight feet asunder. In the worst seasons nineteen arrobas of wine are produced from five hundred plants. It is impossible to form a true idea, without seeing it, of the amazing fertility of the Axarquia. Wherever the soil on

the acclivities is not occupied by vines, the prickly pear grows, and feeds the cochineal insect, while olives, almonds, figs, oranges, lemons, pomegranates, and even the sugar cane, flourish in profusion under that glorious sky. Velez Malaga, five leagues from Malaga, produces much wine, passing under the general name of Malaga.

The wines are conveyed from the press half fermented into the merchant stores in sheepskins. Wine is constantly sent from Malaga to America unbrandied, and, notwithstanding the treatment it receives at the vintage, it bears the voyage well; although without brandy, the English merchants deem the decomposition of the wine inevitable. The truth is, that the bad mode of preservation of the southern wines causes whatever defects are found in them. If they were treated with the same care as the French bestow on their better wines, no such results would ever be observed.

The sherry wine, which some will contend was the "sack" of our forefathers, but which was no doubt a general name to designate the wines of Xeres, Teneriffe, and others of a similar character belonging principally to Spain, is made near Cadiz, or about nine miles from Port St. Mary, at the flourishing town of Xeres de la Frontera. This latter place is in the centre of the vineyards, which cover a district of about six leagues square; of which those which produce wine for the English market are about seven thousand acres. Forty thousand pipes are made, of which above seventeen thousand are exported annually. It is not to be supposed that these are all wines of the first quality; for they include all that go out of the district, high and low priced. There is a great gradation in the prices of sherry, for though the average is not above twenty-six pounds the butt, the charges are from fifteen up to sixty-five pounds. The value of the sherries exported is calculated at four hundred and fifty thousand pounds; the export duties are five hundred thousand. The fol-

lowing is a statement of the butts shipped in the respective years under-mentioned:—

1822	11,508¾	1826	no return
1823	12,476½	1827	20,150
1824	15,059½	1828	26,901
1825	21,297¾	1829	17,839.

The manufacture of the sherries takes place under the care of the agents or principals of foreign houses, who reside on the spot, and this is the reason of the improvement of late years in the wines of Xeres. The vineyards are principally on slopes or declivities. The grapes are left to hang until they begin to shrivel in the sun. The fruit is white, one-eighth being generally the Pedro Ximenes grape, the rest of the grape called Uva; the Tintilla is also mingled, and a dozen other varieties. The bunches are exposed to the sun in baskets for forty-eight hours after they are gathered, and turned and sorted carefully for the better wines. The vines, planted about five feet asunder, are carefully dug round immediately after the vintage, and little hollows are left by some growers round the roots to retain the moisture. In January, or soon after, they turn up the mould, and carefully weed the ground. The pruning takes place in March, and the earth is afterwards raked over, when the vines are propped until the vintage with canes. The labour of the vineyard is continued even to hunting out the insects on the vines. There is, however, seldom or never a failure in the crop, owing to the benignity of the climate. The high price of good sherry is not wonderful, when the care in the growth and the home duties are taken into account. A bottle of very superior sherry fetches three shillings and fourpence on the spot, though the common ordinary wine of the country is but sixpence.

The soil of the Xeres vineyards, by which is understood the entire district for six or seven leagues round, at least the better portion of them, consists of what is called "albariza," "arenas," and "barros," being in fact a light

earth, composed of chalk, sand, and here and there clay, with some other substances. It is exceedingly productive. The produce in average years in good vineyards, is from fifty to sixty butts, or about three hundred gallons the English acre. Some, however, produce six hundred. The soil is dug deep, trenched, and manured, generally with horse dung. The soil where sand prevails, or the *arenas*, yields about five butts an acre; on the *albarizas* the produce is about three.

The grapes are submitted to the usual mode of pressure. The must is left to ferment in the cask, with all the scum retained which the fermentation raises. They do not suffer it to work over, but leave it to deteriorate, and cause a new fermentation upon every change. The March after the vintage it is racked. The elements of the wine must be good, when so little care is necessary in the process. The time the wines are thus left is ten or twelve weeks. The air does not at all affect the wine. Casks are left exposed in all temperatures, and even in the open air, without mischief. The provision of any kind of shelter is considered sufficient, and a good cellar, as it is held in the north, is thought of no moment. In fact, the ropiness of the wines, an accident of very frequent occurrence, is owing to the slovenly mode of treating it after fermentation. The whole process only causes matter for surprise how so excellent a product is obtained at all. Were the same care observed in the first treatment of the must and its subsequent management, as is observed towards the vines, a more delicate product and no *graise* would be the result.

The varieties of the wine are produced by the different modes of treating it. Gypsum is commonly, if not always, used in the manufacture. Pale sherry is made from the same grape as the brown, to the wine from which is added a couple of bottles of very pure brandy to each butt. The brown and deeper sherries are the produce of the same grape, mingled with boiled wine. A butt of pale light sherry is reduced by boiling to a fifth part, by which time

it has got thick, and has acquired a deep rich brown colour. One half of the boiled wine is substituted for a like quantity of the pale sherry, which is first abstracted from the butt. The wine thus boiled down is made from a grape which is cheap and abundant, and therefore the price of the best brown wine is but little increased by the operation. This boiled wine is also used for colouring other wines in different degrees for the British market, which seems to abhor the pure unsophisticated juice of the grape, whether in the wines of Porto, Bordeaux, or Spain. In the latter case, however, the wine is not at all deteriorated by this treatment, or by the mixture of wines of the same quality, which cannot be said of the wines of Portugal or of France when worked up to the English taste. The pale sherries are the most pure, containing nothing but the admixture of a little good brandy, which Spanish brandy of the best quality is justly esteemed to be. This, however, is wholly unnecessary, and is done only to accommodate the fiery palates of Englishmen. The different shades of sherry are all caused by the before-mentioned mixture of boiled wine.

The wine called Amontillado is not always the product of design. The quantity made is small, and it is a drier wine than the common sherry. It is very often the result of accident. To make this wine, the driest of all the Xeres wines, the fruit is plucked two or three weeks earlier than for the other species. It allows of no foreign mixture of any kind. The grapes are trodden by the peasantry with sabots on their feet. The wine is then allowed to ferment for two months or more, when it is racked, and placed in the wood in depositories at Port St. Mary and at Xeres, and not in underground cellars. These depositories are lightly constructed above ground, and generally hold three tiers of casks. The bungs are carelessly closed without affecting the quality of the wine. It is singular, that of a hundred butts of sherry out of the same vineyard, some of them will be Amontillado without

the manufacturer being able to account for it. Not a drop of brandy can be added to genuine Amontillado without spoiling it. The sherry wines average about 20·40 of alcohol.

There is a wine which is grown on the right bank of the Guadalquiver, called Moguer. It is of a cheap and light quality, and being mixed with Xeres, the "inferior sherries" of the grower are thus formed, and exported as such generally to England after some brandy has also been added. The wines are not adulterated by the exporter; though these cheap sherries are often so treated in London by inferior wine merchants with Cape and less costly ingredients. The exporter sends his wines, high or cheap-priced, from the country, strictly for what he announces them to be. Good sherry of a year old cannot be imported into Great Britain under thirty shillings the dozen, nor good four year old under forty-five. Sherries are not to be judged by colour but solely by taste. The best kinds are mingled with nothing but wine of the same quality, which is inevitable, owing to the mode of keeping up the merchants' stock by replenishing their tuns: except a small quantity of brandy when sent to England.

At San Lucar de Barameda, about forty miles from Seville, a very excellent muscadine red wine, called Tintilla, is manufactured. At Cordova they have a dry wine, called Montilla, which is generally drank there.

Paxarete, a wine made at an ancient monastery about two leagues from Xeres, and about five from Ronda, is a rich, sweet, and sparkling wine, from the same grapes as the sherry, but in different proportions, very well known in this country. There is a Paxarete grown also at Xeres from the same grape allowed to become over ripe.

The red wine, called Tintilla and Tinto di Rota, or, as it is styled in England, Tent, is a rich wine, drank generally as a stomachic. It carries about 13·30 per cent. of alcohol. It is made about five leagues from Cadiz, of a grape which is said to be coloured all through.

In Andalusia there is a reddish-white species of wine, very sweet and rich. The wines of colour are well known, and sell for about six pounds sterling when new; but aged, the prices are greatly increased. This is the case also with the Pedro Ximenes.

The wines of Spain generally, both red and white, will one day rank much higher in estimation than they do at present. The importation of them into England is fast encroaching upon the Portuguese, which is not to be regretted. The political condition of the country must change for the better at some future time; then the happy nature of the climate, and the fertility of the soil, will be seconded by industry and science. When that period arrives, it will not be too much to expect that the delicacy and aroma of the French wines will be found in those of Spain; and that, together with good management in the conduct of her vintages, Spain may exhibit wines of the first class as to quality, and rival all other countries successfully. The white and sweet wines are almost all that are now known to foreigners; but the red wines of Spain, properly treated, would be found equal to most others in goodness.

The islands of Majorca and Minorca are well situated for the culture of the vine. The last-named island produces a muscadine wine called Pollentia. There are also some red wines grown there, but none are exported. In Majorca there is a very good red wine, called Aleyor, from the vineyard out of which it is made; used principally for home consumption, at least very little is exported. The white wines are made in a slovenly way, somewhat in the mode adopted in Cyprus, which would seem to indicate that the art had been brought there first, and not acquired from Spain. They use earthen or stone vats in precisely the same manner for the purpose of fermentation. At Banal Busa a wine, resembling those of the Rhine, is grown, well known by the name of Alba Flora; it resembles hock, but is not so dry.

Strength and durability are characteristics of the Spanish wines. Their boiled wines, or *vins cuits*, as the French call them, are mingled with other growths, as well as with sherries, for the sake of deepening the colour, or altering the flavour. Their wines *de liqueur* receive also a proportion of boiled must, strained prior to boiling in large cauldrons, where it is carefully skimmed, and often reduced by evaporation to a fourth part of its original quantity. A good age is required for almost all the Spanish wines to impart to them the proper flavour, reduce their strength, and attach to them that mellowness so grateful to the palate.

The following may serve as some guide to the prices of sherry in England, reckoning the butt at one hundred and eight imperial gallons, or one hundred and thirty of the old measure, duty paid.

Pale sherry of the lowest quality mingled with Moguer wines in the country, and imported duty included, may be sold in England from sixty-five pounds per butt to seventy-five. The better qualities run from eighty to one hundred pounds the butt, and even more. The brown sherries, lowered in the country to the cheapest price, from fifty-eight pounds to seventy-eight, and the better eighty pounds to a hundred and ten per butt.

The Canaries produce annually about twenty-five thousand pipes of white wine for exportation, while fifteen thousand are consumed in the islands, or submitted to distillation. The brandy thus distilled used to be sent to the Spanish colonies. Teneriffe alone produces about twenty-two thousand pipes, of a hundred and twenty gallons. There has been a great corruption of names in the wines of these islands. Canary was once much drank in England, and was known only by that name. The writer of this tasted some which was a hundred and twenty-six years old, it having been kept during all that period in the family cellars of a nobleman, with whom he happened to be dining, and who produced the bottle, in contents little more than a pint, as a *bonne*

bouche. Its flavour was good, and it had ample body. What is called Vidonia is properly the dry Canary wine, best known as Teneriffe. Perhaps it was so called because it is derived from the *vidogna* grape, or is a corruption of Verdona, a green wine of good body, but harsher than Teneriffe, formerly grown on the western side of that island, and shipped at Santa Cruz for the West Indian market, little or none coming to Europe. Teneriffe produces the best wines of all the islands, having the greatest body. The Vidonia is a wine which greatly improves by age, especially in warm climates, resembling Madeira. The Malmsey of Teneriffe is small in quantity, but excellent in quality. At Canary both Malmsey and Vidonia are grown. At Gomera the wines improve so much by age, that the dry kind gain the flavour of Madeira, and may be easily mistaken for it. In fact it is often sold for it in England by the inferior class of wine merchants, to persons who are no judges of what good Madeira should be. On the eastern side of Palma, Malvasia, or Malmsey, is grown, which in a few years gains a bouquet like a ripe pine-apple. The dry wines are not as good as those of the other islands. The best vines do not grow much more than a mile from the sea. In the voyage of Sir John Hawkins to these islands, in 1564, he speaks of grapes there which for size were equal to damsens, and says of the wines that "they were better than any in Spain."

In the early voyages to these islands, quoted in Ashley's collection, but originally in Hakluyt, and therefore as old as 1598 at least, there is a passage relative to sack, which will puzzle wise heads about that wine. Nicols lived eight years in the islands. The island of Teneriffe produces three sorts of wine, Canary, Malvasia, and Verdona, "which may all go under the denomination of sack." He says that the best wines in his time grew on a hill side called the Ramb, in Palma. The term sack, it would thus seem, was applied to sweet and dry wines of Canary, Xeres, or Malaga. In Anglo-Spanish dictionaries of a century and

a quarter old, sack is given as *Vino de Canarias*. Hence it was no doubt Canary sack, Xeres sack, or Malaga sack. In Dodsley's Old Plays, vol. V., the sack drank at gentlemen's tables is described as a mixture of sherry, cyder, and sugar; sometimes eggs were added, and those who did not think it sweet enough, put in more sugar. Hewell's French and English Dictionary, 1650, translates sack *vin d'Espagne*, *vin sec*. Some have supposed sack is derived from *saco*, or the *odre*, or *borracho*, in which wine is carried; but the Spaniards do not apply *saco* to wine skins. The best authority perhaps is Venner's *Via recta ad vitam longam*, printed in 1628. This author, describing Canary wine, says, that Canary "which beareth the name of the islands from whence it is brought, is of some termed a *sacke*, with this adjunct *sweete*, but yet very improperly, for it differeth not only from sacke in sweetness and pleasantnesse of taste, but also in colour and consistence: for it is not so white in colour as sacke, nor so thin in substance." This author says nothing of mixing sugar with this Canary *sacke*. He says, "sacke and other stronger wines are best when they are two or three years old." The same author says sack is "completely hot in the third degree: and that some affect to drink sacke with sugar, and some without: and upon no other ground, as I think, but as it is best pleasing to their palate." Again: "sacke taken by itself is very hot and penetrative: being taken with sugar, the heat is both somewhat allayed, and the penetrative quality thereof also retarded." Sugar was in those days taken with Rhenish, and several white wines. The conclusion is that "Sherris" sack, and all such, were the dry white wines of Spain and the Canaries, not the sweet. Vidonia, for example, was a sack as well as sherry, and the dry mountain wine of Malaga; a Canary sack is said to have been distinguished by the adjunct *sweete:* this was no doubt Malmsey, and plainly shows that sack was a dry wine. The price in 1667, in Anthony Wood's Life, as fixed at Oxford, ran "Sack and Malagaes one shilling and six-

pence the quart, and no more." Again, in 1673, "Sack and Malaga" occur together at one shilling and tenpence the quart. These wines are always together in the lists. "Canary, Alicant, and Muscatel" precede.

Vines in the Canary islands are said to have been first planted there in the reign of Charles the Fifth, having been brought thither from the Rhine, and the change in the climate and soil produced Canary wine; but the vine of which the Malmsey, or Malvasia, is made, was transported there from Candia. A pipe of Malvasia used to sell, about the year 1610, for twenty ducats, which with a duty of seventeen ryals on exportation, made the total expense, for above a hundred English gallons, only three pounds fifteen shillings sterling on the island, when new. Buena Vista, Dante, Oratena, and Tigueste, were formerly boasted of on the island as the favoured spots. The soil is mostly volcanic; in Palma the best wines grow in a soil of this sort, called the Brenia. The Malmsey is very rich and perfect of its kind, and was formerly in great repute. The produce was once annually twelve thousand butts. The dry wine is inferior, and does not keep so well.

The importation of wine from the Canaries into Great Britain, though formerly great, had declined as low as sixty-five tuns in 1785. In 1808 it had again increased; the amount being 1683 tuns. In 1821 it had fallen to about a thousand, and it has not since increased. The wines of the Canaries are second to those of Madeira, but the cause is unknown. Perhaps it may be ascribed to want of care in the management of the vintage; for in Madeira there have been great incitements to improvement from the increasing demand for the wine, and the influx and residence of foreign merchants, all anxious to obtain the best wines, and to create a useful emulation among the cultivators of the vine, which may not have been experienced at the Canaries.

Wine of an ordinary kind is made in the Cape de Verde

Islands; in that of St. Antonio the quantity manufactured is very considerable.

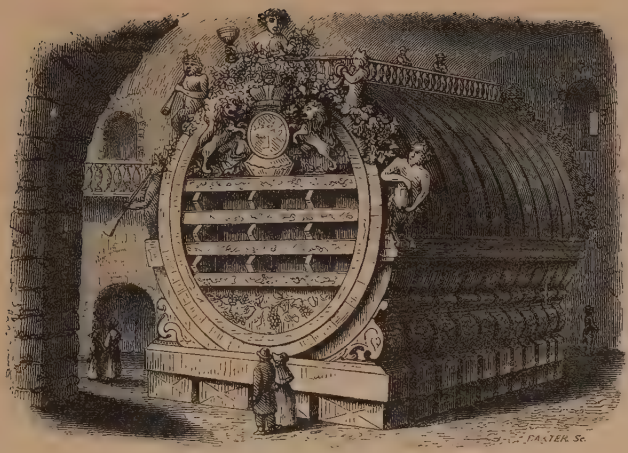
The wine measures of Spain are the *arroba majore*, which varies in different provinces; that which is commonly used contains 4·245 English gallons, or six make twenty-five gallons. A butt of wine contains about thirty of these *arrobas*. Twelve *arrobas minores* are thirty-nine old English gallons. That of Malaga is 4·186; and of the Canaries the same as that of Spain. The *arroba* of Valencia is 3·112 gallons.

The *Cantara*, in like manner, differs; that of Oviedo being 5·098 gallons; of Alicant 3·052, while that of Arragon is only 2·724 gallons.

Majorca and Minorca have the Quartin and Gerra, of 7·168 and 3·187 gallons. In Gallicia the *Moyo*, of 42·798. At Xeres the *botta*, of 120 gallons, and at Barcelona the *carga*, of 32·695 gallons, and *pipe*, of 120.

Borracha means a leathern bottle; so also does *Bota*.

A wine skin made of hog or goat's hide is called *ódre*, dressed with the hair inwards, and pitched or rosined, being more convenient for carrying on the back of a mule, and cheaper than a cask. The bad taste thus communicated, the Spaniards notwithstanding call *olor de* BOTA, the "smell of the *bottle*," by custom, and not *de ódre* of "the skin," as it is in reality. Yet they say, *ódre de buen vino*, a "skin of good wine." *El de los odres*, "you with the wine-skins!"



Heidelberg Tun.

CHAPTER VII.

WINES OF GERMANY AND SWITZERLAND.

ANTIQUITY OF THE VINE IN GERMANY—THE RHEINGAU—SPECIES OF SOIL —CHARACTER OF VINES—LARGE TUNS—NATURE OF THE WINES, AND PRICES—WINES OF SWITZERLAND.

THE Germans, like vain men of other nations upon analogous subjects, have wasted a good deal of idle conjecture on the antiquity of the culture of the vine in their country. While many of their writers ascribe its introduction to the Emperor Probus and his legions, about the year 280; others go up to the Asiatic Bacchus, and pretend that Bacharach, in the vicinity of which so many excellent vineyards are found, derived its name from the deity of wine: a stone still existing in the river, which they call "Bacchus' altar." Had the etymology been treated metaphorically in this way, to describe the vine country on the Rhine, and some of its tributary rivers, it would not have been out of place to call it the country of Bacchus. The

Germans boast of four other places sacred to Bacchus: Steegbach, situated on a hillock, they call the ladder of Bacchus; Diebach, the finger *(digitus);* Handbach, or Manersbach, the hand; and Lorch, or Laurea, the bay or laurel. Formerly it was impossible to enter a German house without being offered "large jacks of wine," so attached were they to the rites of the purple deity. The banks of these rivers are covered with vineyards. The Rhine, Moselle, Neckar, and Mayn, are gardens of the vine. Nor have the Germans been content with cultivating the banks of rivers alone, but the higher lands are planted with the greatest success. It matters very little whether the territory of Treves poured out its abundance in the time of the Romans or of Charlemagne; the Germans have enjoyed it since the year 400; and the Frenchman who said the Germans had found out the perpetual motion in their cups, or tall old wine glasses, was not far from the truth. The German loves his glass of cheerful wine; and while he cultivates his vines, let the grave burgher of Treves swallow his *wein* (wine) of Augenscheimer, his Thiergartner, Schamet, and Pitcher, out of his green glasses to fourscore years of age, provided he will allow the foreigner to share a little of the superfluity of his golden vintage. From Bonn to Coblentz, and from the latter city to Mayence, the country is covered with vineyards. The Johannisberger of "father" Rhine, the Gruenhaeuser or the Brauneberger of the Moselle, and the Hockheimer of the Mayn, each distinguish and hallow their respective rivers in the eyes of the connoisseur in wine. They are some of them powerful wines when genuine, as their devotees can well attest.

Whoever has visited the noble Rhine must have felt sensible of the beauty of its vineyards, covering steep and shore, interlaced with the most romantic ruins, towns ancient and venerable, smiling villages, and the rapid broad German river, reflecting the rich scenery on its banks. No where is the fondness for vine cultivation more

evident in every grade and class of farmer than in the German wine districts. The humblest peasant has his square yard of vineyard. Every accessible spot on the declivities with an auspicious aspect is decorated with the favourite plant. From Mentz even to Bonn the vineyards of the Rhine are observed to greater advantage than any similar cultivation in other countries: Erbach, enthroned on its vines; the Rheingau, its Johannisberg on a crescent hill of red soil, adorned with cheering vegetation; every cranny cultivated that will carry the vine; Mittelheim, Geisenheim, and Rüdsheim with its strong, fine-bodied wine, the grapes from which bask on their promontory of rock, in the summer sun, and imbibe its generous heat from dawn to setting; then again, on the other side. Bingen, delightful, sober, majestic, with its terraces of vines, topped by the chateau of Klopp. The narrowed river, its steep hills and vines, the corn and fruit which the vicinity produces, all remind the stranger of a second Canaan. The Bingerloch, the ruins, and the never-failing though formal vines scattered among them, like verdant youth revelling amid age and decay, give a picture no where else exhibited, uniting to the joyousness of wine the sober tinge of meditative feeling. The unclad hill summits back the picture, with feudal relics or monastic remains. From below Asmannhäusen to Lorch, crumbling ruins still mingle with the cool leaf and rich purple of the grape. Bacharach is near, the wine of which, probably the fancy of the drinkers having changed, is now pronounced second-rate in quality, though not long ago, even the French celebrated it in their Bacchanalian songs. This wine is still very good, fashion may say what it chooses. Landscapes of greater beauty, joined to the luxuriance of fruitful vine culture, can no where be seen; perhaps there is something to be added, for the alliance of wine and its agreeable qualities, with the noble scenery of the river. The mind will have its associations upon all subjects.

To the north of Coblentz the wines are of little compa-

rative note, though Bodendorf. near Bonn, has been said to produce a Rhenish wine of the second growth, thus far to the north. Coblentz is about the latitude of Plymouth, while Mayence itself is nearly on the same parallel with the Lizard in Cornwall. Either on the Rhine, or on its tributary rivers between these two places, all the most celebrated wines of Germany are grown. None of the better wines of France are grown so far to the north. It is at Coblentz that the soil first becomes particularly well adapted for the cultivation of the vine. The right bank descending is most noted for its wines, but the vineyards, in many parts, cover both banks.

The soil on the banks of the Rhine, from the variety of rocks, throughout the great wine district, is various; to the limits of that district, north and south, we have already alluded. To the east and west the boundaries are irregular, as embracing the Moselle to Treves, the Ahr, the Mayn, and other streams. Granite decomposed, and quartz in favourable sites, offer good vine land, and so does sienite. Clay slate, mingled with quartz, is observed to be highly favourable with basalt. Where marl, mingled with pebbles, occurs, the vines succeed best; nearly the same character, but, if any thing, still a better, may be given to dolenite. Variegated sandstone in decomposition does not do well for the vines in dry seasons, though light in its nature; when mingled with clay, or other earths, its produce is tolerable, but it gives no remarkable wine. Shell marl, where the calcareous properties are most prevalent, when mixed with the clay soil, will grow tolerable good vines, and the same when they are reared upon a coarse limestone well worked. Kiffer produces only weak wine. Schistous marl, where it occurs decomposed, yields a fertile soil for the vine. When mingled with round stones or sand it is very favourable, but no remarkable wine is produced from it. It is strange that the Germans dress their vines with strong manures, which the French and Portuguese pronounce to be injurious.

The grapes which are preferred for general cultivation are the *riessling*, a small white species, harsh in taste, but in hot seasons furnishing a remarkably good wine, having a fine bouquet. The *kleinberger*, a productive species, ripens easily, and a small Orleans variety is very widely cultivated. The vines are all of the low training, about three or four feet high. The produce of all the vineyards it is impossible to ascertain. The circle of Coblentz contains nearly seventeen thousand Prussian acres, each of which is calculated to yield wine to about fifteen pounds sterling annually in value. The circle of Treves, containing twenty-three hundred acres, gives an annual product of thirty-nine pounds sterling each acre. In Wirtemberg, the product of the kingdom, or of sixty-one thousand five hundred acres, has been valued at about four millions of florins. The true Hockheimer is grown to the eastward of Mentz, between that place and Frankfort. Each acre contains four thousand plants. The produce, in a tolerable year, is twelve large casks, which sell for about one hundred and fifty pounds each. Worms was formerly reported to grow a hundred and fifty fudders within the territories of the city, "sweeter than virgin's milk," (liebfrauen milch).

The vintage does not take place until the grapes are more than perfectly mature, in fact, until they are soft from over ripeness and on the verge of change. They are carefully gathered, the bad fruit picked out, and with the stalks put aside. The wine of the pressings is separated, *most vom ersten druck*, *vom nachdruck*. The more celebrated of these wines are all fermented in casks, and then after being repeatedly racked, suffered to remain for years in large fudders [1] to acquire perfection by time. These huge casks contain each about three hundred and fifty tuns. The wines mellow best in large vessels; hence the celebrated Heidelberg tun, thirty-one feet long by twenty-one high, and holding one hundred and fifty fudders, or six hundred

[1] A common fuder, or fudder, contains only two hundred and fifty gallons.

hogsheads; the second and later of these was built at Heidelberg in 1663. That which preceded it held but one hundred and thirty-two fudders. This tun is decorated with all kinds of fantastical ornaments. Tübingen, Grüningen, and Königstein (the last held 3,709 hogsheads), could all boast of their enormous tuns, in which the white wines of the country were thought to mellow better than in casks of less dimensions. These tuns were once kept carefully filled. The Germans always had the reputation of being good drinkers, and of taking care of the "liquor they loved." Misson says in his Travels, that he formerly saw at Nuremberg the public cellar, two hundred and fifty paces long, and containing twenty thousand ahms of wine.

The German are a distinct class in character from all other wines. They are generous, dry, finely flavoured, and endure age beyond example, and have of late years been much improved in quality by the sedulous attention bestowed upon their growth, and a better management at the vintage. Indeed the tendency to improvement in all vine countries of the Rhine is too obvious to be passed over, and the wines show a corresponding excellence. They average about 12·08 per cent. of alcohol. They have been supposed to turn acid sooner than other wines, though the reverse is a remarkable fact. On this subject a recent writer observes, with respect to Moselle, and the same will hold good with other wines of Rhenish character, that, "The country which borders on the Moselle produces abundance of grapes, and some of the wines have an agreeable flavour, especially the vintage of Brauneberg. This highly flavoured wine has within the last seven years become a fashionable beverage at the first tables in London, and when iced in summer, nothing can be more grateful. Some of it has the flavour of the Frontignan grape, without its sweetness. This wine has a singular quality; it is difficult to make it into vinegar. The author accidentally discovered this property by putting a few bottles into a greenhouse, and afterwards into his cellar, for the purpose

of using it as vinegar; but the following spring he was surprised to find that no acetous fermentation had taken place. It has been generally supposed in England that the wines of the Rhine and Moselle are more acid than the white wines of France; but if the above experiment may be any criterion of the qualities of the former, it would prove that they are less acid than Sauterne, Barsac, and the Graves; for it is well known that it is necessary to sulphur the casks of these wines to prevent the acetous fermentation taking place. Acids are supposed to generate gout, and in England Rhine wines are on this account forbidden to gouty subjects; yet the gout is a disease rarely known on the banks of the Rhine, where hardly any other wine is drank. We, therefore, conceive this to be a vulgar error, and that no wine is better for a gouty patient than that of the Rhine; the author can testify this from his own experience, and the evidence (which can be more depended on) of an eminent English physician, who practised at Mayence for many years, and was of opinion that the strong wines of the Rhine were extremely salutary, and that they contained less acid than any other; moreover, they are never saturated with brandy, as the French white wines are. Although Moselle is become so fashionable, it is a cheap wine, the best Brauneberg only costing twelve Napoleons per ahm, of thirty-six English gallons, and, including the duties and all expenses, it may be imported for three shillings a bottle into England."

That this is correct, as far as regards himself, the writer of this volume can vouch. If he take no more than a glass or two of port, so that the spirit taken with it is not enough to stimulate the stomach, acidity is certain to be felt, but this is never experienced with sound Rhenish wine. Some writers account for this property in German wines by the completeness of their fermentation, and the consequent difficulty of deranging their affinities.

To proceed northward with the "Rhine wines," following the course of the main river. The ordinary wines are

not worthy of note: but wines up to the best class are found in great variety. The Liebfrauenmilch, already mentioned, is a well bodied wine, grown at Worms, and generally fetches a good price. The same may be said of the wines of Kœsterick, near Mayence, and those from Mount Scharlachberg are equally full bodied and well flavoured. Nierstein, Oppenheim, Laubenheim, and Gaubischeim are considered to yield excellent growths, but that of Deidesheim is held to be the best; the last of 1825 sells for twelve pounds sterling the ahm, of thirty gallons, in the present year. The prices vary much, and depend in a great degree upon the age of the wine. New wine may be had from fifteenpence the *maas*[1] to four and seven-pence. Very aged wine from eight or ten up to eighteen shillings the bottle. The Rhenish wines, and particularly Hock, drank in their native territory, were not offered at table in respectable families until of late, before they were nearly, if not quite, fifty years of age. It is different now. They are drank out of green glasses as thin as paper, so that the stranger almost wonders they are strong enough to retain the liquid. It is thought the flavour is improved by thin glasses. Perhaps this is mere fancy, but every one experiences how much pleasanter Chateau Margaux drinks this way at our own tables.

The river Mayn runs up to Frankfort close to Mayence, and on its banks the little town of Hockheim, once the property of General Kellerman, stands upon an elevated spot of ground, in the full blaze of the sun. From Hockheim is derived the name of Hock, too generally applied in England to all German wines. No trees are seen to obstruct the genial fire from the sky, which the Germans deem so needful to render their vintages propitious, nor does it favour them to the full glow required more than once in five or six years, so as to perfect a vintage of tolerable renown. The town stands in the midst of vineyards.

[1] A little more than two quarts.

That which produces the Hockheimer of the first growth is about eight acres in extent, and is situated on a spot well sheltered from the north winds, upon a little hill behind the deanery. The wine of 1766 and 1775 now fetches forty-two and fifty pounds the ahm. The other growths of this wine come from the surrounding vineyards. The whole eastern bank of the Rhine to Lorich, called the Rheingau, about fourteen miles in extent, has been remarkable for its wines during many centuries. It was once the property of the church. The entire district is a delicious vine-garden. In this favoured spot grows the castle, or Schloss-Johannesberger, once the property of the church, and also of the Prince of Orange. Johannesberg is a town, with its castle (schloss), on the right bank of the Rhine below Mentz. The Johannesberger takes the lead in the wines of the Rhine. The vines are grown over the vaults of the castle, and were very near being destroyed by General Hoche. The quantity of wine is not large. The price of the vintage of 1811 is about thirty-six pounds the ahm, of thirty gallons. That of 1779 sold for seventy-five in the year 1833. The vineyard is now the property of Prince Metternich. The other growths near the same vineyard are excellent. The Johannesberger of Messieurs Mumm and Giesler, of Cologne and Johannesberg, their own growth of 1822, brought, in 1833, from twenty-five to sixty pounds the ahm.

Rüdesheim produces wines of the first Rhine growths: the ahm of 1811 brings fifty-five pounds. The Steinberger, belonging to the Duke of Nassau, takes rank after the Schloss-Johannesberger among these wines. It has the greatest strength, and yet is one of the most delicate, and even sweetly flavoured. That called the "Cabinet," from the vintage of 1811, brings seventy pounds sterling the ahm at present, or nearly ten shillings the bottle. The quantity of the first growth made, is small. Graefenberg, which was once the property of the Church, produces very choice wine, which carries a price equal to the Rüdesheim.

Marcobrunner is an excellent wine, of a fine flavour, especially when the vintage has taken place in a warm year. The vineyards of Roth and Konigsbach grow excellent wines. The wine of Bacharach was formerly celebrated, as before mentioned, but time produces revolutions in the history of wines, as well as in that of empires. Notwithstanding the quality of endurance many of the second-rate growths possess, and a freedom from acidity equal to those which hold the first place, they are by no means so well known as they ought to be. The oldest wine which is commonly offered to the purchaser, is that of 1748, a year when the season was exceedingly propitious to the vintage. Older wines may be met with, but less frequently. The excellence of the wine in any particular year always depends more upon the warmth of the season, than upon any other cause, and the high price of the wine in corresponding years rates accordingly. The Germans say, the wines of the best body are made on the higher lands, and the worst on the lower; the last requiring the longest keeping, to render them mellow for drinking. The stocks of some of the merchants are very large, although the wine is not kept out of the market so long as formerly. It is a mistaken notion that the virtue of any wine depends upon its great age. The wines of 1783 bear a very high character. There is something unaccountable in the extraordinary durability of wines grown so far to the North, where the slightest increase of warmth in a season causes such a difference in the quality of the wine. While strong southern wines suffer from age after a certain period of years in bottle, and begin to deteriorate sensibly, the Rhine wines seem possessed of inextinguishable vitality, and set the greater part of rivalry in keeping at defiance. It is generally found that wines with the smaller proportion of alcohol change sooner than those which are strong. The Rhenish wines averaging so little in spirit, will endure longer, and continue to improve by age as much as the more potent wines of the South, having

double the alcoholic strength. The best vintages were 1748, 1766, 1779, 1783, 1800, 1802, and 1811. The Steinwein of 1748, brought in 1832 seventy pounds the ahm. This may serve to show how much these wines gain by age.

On the whole the wines of Bischeim, Asmannhäusen, and Laubenheim, are very pleasant wines; those of rather more strength are Marcobrunner, Rüdesheimer, and Niersteiner, while those of Johannisberg, Geissenheim, and Hockheim, give the most perfect delicacy and aroma. The Germans themselves say, "*Rhein-wein, fein wein; Necker-wein, lecker wein; Franken-wein, tranken wein; Mosel-wein, unnosel wein,*" "Rhine wine is good; Neckar pleasant; Frankfort bad; Moselle innocent."

An effervescing Rhenish has recently been produced. It is made from the lower wine growths, but it is by no means worthy of the regard which some would claim for it. It is destitute of the qualities of genuine Rhenish, and equally so of the fine flavour of Champagne. [See letter in Appendix, No. XIII.]

The red wines of the Rhine are not of extraordinary quality compared to the white. The Asmannhäuser is the first, and closely resembles some of the better growths of France. Near Lintz, at Neuwied, a good wine, called Blischert, is made. Konigsbach, on the left bank of the Rhine, Altenahr, Rech, and Kesseling, yield ordinary red growths.

The Moselle wines are light, and secondary to those of the Rhine and Mayn. The most celebrated is the Braune-berger. The varieties grown near Treves are numerous. A Dutch merchant is said to have paid the Abbey of Maximinus for a variety called Gruenhäuser, in 1793, no less than eleven hundred and forty-four florins for two hundred and ninety English gallons in the vat. This wine was formerly styled the "Nectar of the Moselle." It made men cheerful when drank in a quantity, and did good the next day, leaving the bosom and head with-

out disorder,—such is the character of it, by the German jurist Hontheim. These wines being light, with a good flavour, have of late become favourites in England. They will not keep so long as the Rhine wines, but they are abundant and wholesome, as indeed are all the Rhine wines, particularly for convalescent persons after low fevers. Near Treves are grown the wines of Brauneberg, Wehlen, Graach, Zeltingen, and Piesport. The wines of Rinsport and Becherbach are considered of secondary rank. The wines of Cusel and Valdrach, near Treves, are thought to be possessed of diuretic properties, and even to cure the gravel. In about five years these wines reach the utmost point of perfection for drinking. They will not keep more than ten or twelve in prime condition.

The wines called "wines of Ahr," resemble those of the Moselle, except that they will keep longer. Some of them are red.

The "wines of the Neckar," are made from the best French, Hungarian, and even Cyprus vines. The most celebrated are those of Bessingheim. They are of a light red colour, not deep, and of tolerable flavour and bouquet.

Wisbaden grows some good wines at Schierstein, and Epstein, near Frankfort. The best wines of Baden are produced in the seigniory of Badenweiler, near Fribourg. At Heidelberg, the great tun used to be filled with the wine of that neighbourhood, boasted to be a hundred and twenty years old, but it gave the wine no advantage over other Neckar growths. Some good wines are produced near Baden. The red wines of Wangen are much esteemed in the country of Bavaria, but they are very ordinary. Wurtzberg grows the Stein and Liesten wines. The first is produced upon a mountain so called, sold very dear, and called "wine of the Holy Spirit" by the Hospital of Wurtzberg, to whom it belongs. The Liesten wines are produced upon Mount St. Nicolas. Straw wines are made in Franconia. A *vin de liqueur*, called Calmus, like the sweet wines of Hungary, is made in the territory of Frank-

fort, at Aschaffenbourg. The best vineyards are those of Bischofsheim. Some wines are made in Saxony, but they are of little worth. Meissen, near Dresden, and Guben, produce the best. Naumberg makes some small wines, like the inferior Burgundies.

The importation of German wines into England, in 1831, was about seventy thousand gallons.

The better wines of Germany are of a drier quality than those of France. Compared by some to the *vins de Graves*, they are in reality of a very different character. Some of them have what the French call the *gout de pierre*, but as the soils that produce them are very various, so no two kinds exactly resemble each other, even to a taste not over nice. Perhaps the better kinds are the most wholesome wines in the world. The "golden wine" of the father river deserves its altar to Bacchus.

The ahm of wine differs in quantity. The Rheingau merchants send wines to England by the ahm of thirty imperial gallons. The common German ahm has been usually reckoned at forty old English gallons, and a little more. About "two ahms and a half formerly made a pipe," *ein weinfask von anderhalb ahm, ein pipe.* A *both*, or butt, contained three ahms, or a hundred and twenty-six gallons. A Rhenish wine cask of six ahms, called a *fuder*, or *stuckfask*, contained about two hundred and fifty gallons, or a tun of Rhenish, according to the old measure, but wine is now almost universally sold by the ahm alone.

Switzerland does not supply more wine than suffices for home consumption. The best is produced in the canton called the Grisons. It is named Chiavenna wine, and is of an aromatic flavour, white from the red grape. In the Valais they make a Malvasia of good quality; both these are white wines of the luscious kind. The Valais also produces red wines, made at La Marque and Coquempin, in the district of Martigny.

The other wines are for the most part red. Schaffhausen produces them in plenty, and of tolerable quality.

At Basle they make the "wine of blood," as it is called from the combat of Birs, in the reign of Louis XI. of France, when sixteen hundred Swiss fought thirty thousand French, and only sixteen survived, dying more of the fatigue of the combat than by the power of the enemy. These wines are also known as those of the Hospital and St. Jaques. The red wines of Erlach, in Berne, are good. The red of Neufchâtel is equal to the third class of Burgundy. St. Gall affords tolerable wines. In the Valteline the red wines are remarkable for durability, and are of very good quality. They make a wine in that district which much resembles the aromatic wines of the South of France. A very generous red wine is made in the Valteline from the red grape, which is suffered to hang on the vine until November, by which time the fruit has become very mature. It is then gathered, and carried to a large room or barn, and hung up by the stems for two or three months. The bunches are picked over with great care, and every decayed or injured grape is thrown aside, so that none but sound fruit is submitted to the press. The must is placed to ferment in an open vessel, and twice a day it is skimmed. It continues to ferment for a week or fortnight, according to the weather, during which the operation of skimming is constantly repeated. After the fermentation is over it is put into a close vessel, and set by for a twelvemonth. This wine is remarkably luscious, and will keep well for a century, having great strength and body. The Swiss, when it is a year old, bore a hole two-thirds of the way up the head of the cask, drink the wine down to the hole, and then refill the cask.

The canton of Vaud produces the largest quantity of wine. The wines of Cully and Désalés, near Lausanne, resemble much the dry wines of the Rhine in quality, and are of considerable durability.



The Atlantic Islands.

CHAPTER VIII.

WINES OF PORTUGAL AND MADEIRA.

THE METHUEN TREATY—QUANTITY OF WINE IMPORTED IN 1700 AND 1800—MONOPOLY OF WINES GIVEN TO A COMPANY—CONDUCT OF THE COMPANY—VINEYARDS OF THE DOURO—OF MADEIRA AND THE AZORES.

THE history of no country in the world furnishes an example of greater political absurdity than our own, in the conclusion with Portugal of what is commonly called the Methuen treaty, better characterized as the Methuen, or wine merchants' job. By this treaty Englishmen were compelled to drink the fiery adulterations of an interested wine company, and from the coarseness of their wines, exposed to imitations of them without end, from materials some of which had never been in Portugal. These sophistications complained of in 1730, increased after the monopoly was granted to a company. The delusion of en-

couraging our woollen manufactures, was the bait held out in exchange for the rejection of better wine, and the substitution of a third-rate article. The objections to a treaty of such a nature are obvious enough to every impartial reasoner, and the coarseness of the attempts made to justify its continuation, displayed unequalled ignorance and boldness. The time the treaty was in full force, without any attempt to qualify or annul it, almost affords ground for the belief, that Englishmen formerly never looked beyond the surface of things. It is consolatory that this treaty is now gone to the tomb of the Capulets.

Had the wine *(Vinho)* of Oporto been of a first-rate class, and Englishmen a little less attached to coarse wines of a hot character, it is probable the difference in the wines themselves, unless indeed the adulteration was very gradual, would have struck them by its singularity. It is impossible to believe that the port wines of 1700 and 1800 were of the same degree of excellence; it is probable they had not much resemblance at all. The lapse of a century would, it is true, in the span of human life, render the comparison impossible. This, no doubt, prevented a change in the original quality of the wine from being discovered. The writer a few years ago, dining with a diplomatic character belonging to Portugal, drank Port wine, he believes, for the first time in his life, and a better wine he never recollects to have tasted; but this was of a kind called *vinhos separados*, not export wine. This wine was not what the French would call wine of the first class. It wanted the delicacy of the highest wines of France, but it was every thing that could be desired, stomachic, mellow, of good strength, and colour. It was what all Port wine drunk in England should be in respect to body, flavour, and quality. The author was informed it had been brought over from Lisbon out of the wine sent there to be consumed by the better classes in the country. The mystery was revealed; it had not been treated with elder berries to deepen the colour, nor been mingled with Beni Carlos,

and brandy for the English market. Perhaps it had been grown out of the company's line of demarcation.

The increase in the consumption of the wine of Oporto, found in comparing the consumption of the first ten years of the last century with the like number of the present, is striking: it is as follows:—

		Tuns.	Hhds.	Gall.
Wines imported from	1700 to 1710	81,293	0	9
Ditto	1800 to 1810	222,022	2	52
Difference in	1810	140,829	2	43

The non-importation of the pure wine first took place about 1715. It was then the Portuguese first began to mingle brandy with the wines they sent to England. About this time, or two years later, a duty of 55*l.* 5*s.* per tun was laid upon French wines, while Portuguese wines were admitted at 7*l.* 5*s.* 3*d.* a tun! It is evident, therefore, that the demand for the worst wine arose out of the cheapness of one article, and the almost prohibitive duty placed upon the other: in other words, that our taste for Port wine was forced upon us by our rulers, really out of jealousy towards France. There is no necessity to search for any other reason why Port wine is now so generally drank in England. It was no intrinsic worth in the wines themselves which introduced them here. Now custom has hallowed them, they are not likely to lose much ground for many generations, even should they get worse instead of better. Englishmen are wedded to long usages, and numbers believe Port wine is the only real wine in the world, and shiver whenever Romanèe Conti, or Lafitte, is named.

In 1756 a monopoly of the wine country of the Upper Douro was given to a company, which did not fail to take advantage of their situation. They obtained a charter through the Marquis of Pombal, whose wines they gratefully took in return under a false denomination. They

fixed the price of the wines, and restricted the limits of the vineyards! The ostensible objects of the company were, as was natural, plausibly expressed [1]. One of these was to prevent adulterations of the wines, though there was no evidence that any thing but a small quantity of brandy had ever till then been mingled with them, from the unfounded notion that it was essential to their durability. This first happened, as mentioned above, about 1715. In 1756 began the era of the deterioration of these wines, under the superintending care of the company.

How the company proceeded in exemplifying their zeal for the preservation of the genuine character of the wine is a well-known history. It may first be necessary to remark, that no wine, let it be grown where it may, can ever approach to the character of a first, or even of a second rate wine, unless it be the pure juice of the grape, unmingled with any thing but wine, and that of its own class. Wine of a prime growth, if mingled with an inferior kind of ever so good a quality, is sure to become cloudy,

[1] The following are some of those useful regulations, which won over all opposition, for they are in themselves good. They turned out, however, to be prohibitive only upon those who were *not* of the company, and enabled the latter to engross all the business of deterioration itself for its own profit.

"1. That the district calculated for the growth of the export wines should be marked out, and the mixture of these wines with others from without the boundary prohibited.

"2. That no one should be permitted to cover the vines with litter, as this operation, though it considerably augments the produce, tends to deteriorate the quality of the wine.

"3. That, in the manufacture of the wine, no one should use elder-berries, which not only give it a false and evanescent colour, but also change its natural flavour.

"4. That after each vintage, a list should be made out of the number of pipes in every cellar within the district; and that the wine-tasters of the company, and others to be nominated by the farmers, should prove them, and arrange them in classes, distinguishing such as were fit for exportation, and delivering to the proprietors a corresponding ticket.

"5. That the market should be opened on a certain day, and should be free to all English merchants, to such Portuguese as were qualified as legitimate exporters, and to the company itself."

and to be deteriorated; its distinct and delicate character is for ever destroyed. The company were, it may be supposed, well convinced of this truth. They were not ignorant that the wines of France, of the first class, were the finest in the world, unmatched out of that country; did they then determine to raise the Portuguese wines into competition with them, upon the strength of the extraordinary means they had in their possession for effecting such an improvement?

They did no such thing. They began by proscribing all offenders, only that they might themselves put on the character. They levied fines upon all persons who had elder-berries in their possession, and got the trees rooted up. They then began their own career of amendment by buying or making brandy, and pleading the necessity for its use in adulterating the wine in a greater degree than before. They charged the taste of Englishmen as their excuse, and gradually proceeded to encourage the mixing together all sorts of grapes, and fermenting the must carelessly, in order to increase the quantity. They grubbed up the fine old vines, and got those substituted of less virtue but fuller bearing. They did not spare brandy in the operation, nor elder-berries, nor burnt corn, nor any thing that would answer to colour the wine when it was not thought deep enough. They created at length such a wine as the world never before saw. This wine was sometimes so *improved* by subsequent adulterations in London, where the imitations of port wine have been found to be facile in consequence of the absence in the larger part of the wine imported of the prime qualities of good wine, that a vast quantity more has been sold than Oporto with its company has ever been able to export. To this the company were thus indirectly if not directly accessary.

The company, as soon as it was installed in full plenitude of monopoly, guided by merchants from England settled in the country, not only blended good and bad

growths together to make one profitable class of wine, but raised the price to the consumer, while they deteriorated the article he purchased. The prices were soon carried far beyond what they had been originally, until the Portuguese complained of the extortion. The privileges of the company were then so far moderated, that the export wines alone were left wholly in their hands, and so have remained, quadrupled in price to Englishmen, and debased in quality. Englishmen were thus forced to drink worse wine, and that wine exclusively. In 1730 good port wine was sold in England at two shillings the bottle, and white wine of Portugal at the same price. Canary was a third dearer; French wine, it was complained, was so taxed, that it was charged double that of Portugal.

If the company had done its duty, and acted up to its professions, the wine of Oporto, which is naturally of a good character, would have been improved into a wine of the first class. A generous and honourable competition with French wines, until by perseverance and a liberal outlay of capital, wine approaching Burgundy, Côte Rôtie, or Bordeaux, was produced, would have been something meriting praise, and every step attained in the improvement of the wine would have rendered imitation in England more difficult, by which means the demand would have extended itself in a fair and honourable way, and the British nation would have escaped the impositions practised upon it from the facility of imitation. Five-eighths of the wine brought to England is so coarse, and is such a medley of ill-flavoured heterogeneous vine produce, Portuguese brandy, and other matters, that any ingenious person may increase one pipe to three by the addition of unexciseable articles, without a fresh injury to the stomach of the consumer, or to the appearance of the wine. This is not an unfaithful picture of facts, which are dwelt upon in another chapter.

No wine is worthy to be drunk in a highly civilized community which is not made of grapes alone, carefully

selected from vines upon which practised labour has bestowed the proper culture, and that is not carried through the operations of the vintage and into the cellar with the most watchful attention. Such wine must be exported with scrupulous regard to the nature of the article. In Spain, where, in consequence of a demand for low-priced sherry, Moguer wine is mixed with a better kind in such a proportion as to reduce the butt to the intended value, there is no disguise in the matter. The grower disposes of the wine to the merchant for what it really is, and the merchant exports it under the same character. With sherries adulterated in England the foreigner has nothing to do. The best class of these wines cannot be successfully imitated, for the growth and manufacture have gone on improving, and though the absurd custom of adding the trifling quantity of two bottles of brandy to the butt continues, no other mixture whatever is permitted in practice. A full proportion of brandy exists in southern wines naturally, and by consequence in those of Oporto. What is added to wines by nature of so much strength must be injurious, and can never assimilate, as the natural alcohol does, with the wine even during fermentation. The trade may talk of *fretting in*, and what not, the commingling is never perfect, and the alcohol uncombined is so much more noxious to the stomach of the drinker, who, in fact, drinks not water and brandy, but wine and brandy. What, then, is to be said of the addition of three or four gallons of brandy to a pipe of wine naturally strong, and that too during the process of fermentation, when the must or wine is in the most delicate state of transition, and the least interference is destructive to its future quality? This was done with the Portuguese wines in the teeth of better knowledge. An additional quantity was added on exportation. In wines so deteriorated, the difference which would exist between the first and second growths could seldom be discovered, and it is clear, from the complexion of the thing, that as little as possible of such a

distinction was desired. The company was far better pleased that there should be one class alone, absorbing the worst as well as the best; as by this means all the wines approached a fixed price. It may be replied, how can such a supposition be reasonable, when port wine is found to differ so much in quality? To answer this, it may be observed, that age, brandy, and the soil, will make a difference in the strength and taste of one wine, but they cannot alter the character of the class, it may be ordinary wine notwithstanding. The wine of the company's exportation could not be mistaken. Age or other causes might evaporate some of the spirit, and make it tawny as in youth it was coloured, but it was the Oporto company's wine, and they still preferred quantity to good quality.

Never was there more sophistry displayed than in the laboured answer made by the company at Oporto to the charges brought against them; they published utter nonsense in their defence. The grounds upon which they rested their arguments, and the arguments themselves, were insulting to the understanding of all who knew any thing about wine in this country. An eminent wine-merchant of London observed, "that it seemed as if the Oporto people were fools enough to imagine no one knew any thing about wine but themselves, and that there were no other growths than those of Oporto in the world."

Why Englishmen should not have the benefit of the best wines of the Cima do Douro in a pure state, without adventitious mixtures, and as cheap as other nations, no rational answer can be given. The fact, therefore, must be, as is stated above, and the consequences are reacting upon the interests of those who abused their monopoly. A more correct judgment will be formed by the bulk of wine drinkers respecting the true merits of the beverage. The late alteration of the duty upon French wines was a wise and considerate step, and will lead the way to so just an estimate of the merits of wine, that the company of Oporto must see its old system of operations perish. Old habits

will decline perhaps more rapidly than they arose. Time, however, must be allowed for the complete extinction of English prejudices.

The powers given to this company were of the most despotic character. As all competition was swept away, and they were the sole dictators, so they found the usual evils of arbitrary power recoil upon themselves. They set bounds to the vine country—"so far shalt thou grow and no farther"—was the mandate to the possessor of the soil. The consequence was extensive smuggling. Smuggling, as it naturally does when prohibition is overdone, demanded injurious and tyrannical power over the agrarian population to repress it, in vain. The next step was to crave military aid of an arbitrary government for the purpose, and military interference was followed, as usual, by waste and ruin to the inhabitants without removing the evils;—those evils which were the pretences for the establishment of the monopoly of the company, and the removal of which they urged as most necessary for the interest of the trade, but which they renewed immediately, and systematized for their own advantage. Having monopolized the wine and brandy trade, and even the taxation upon them and the brandy imported into Portugal, they purchased inferior wines to dispose of as port, or mingle with the stronger kinds, to all which they affixed the price, and for ever barred the rating into classes which could only be effected by greater remuneration from the merchant to the grower, and in consequence by a larger rate of payment for the first wines from the consumer. One class alone, differing a little in strength and taste, was most beneficial to the monopoly, and they were determined to have as much as they could obtain of that at the smallest cost, because it was attended with the largest profit to themselves. They levelled the superior growths known before that pernicious interference, and amalgamated the white wine manufacture into the common hotch-potch which composed the company's favourite and unique species.

The mischief was long accomplished before a sort of modification of the company's charter took place in 1823, in consequence of the injury to agriculture and commerce arising out of the existence of this sordid body, even in the view of so obtuse a government as that of Portugal. Their power had been too long absolute. Approached for such a time only by memorial or petition, they were considered within their agrarian and mercantile domains as very lofty and potent dignitaries. Though their wings were apparently clipped by the government, the influence of long-exercised power could not rapidly suffer a diminution; nine years have elapsed since the decree was issued, but the wine has not changed. Whether on the expiration of the term of five years, during which the decree was to be in force, things did not go back to precisely their old state, the reader may divine. Trade must be free as air. The folly of the interference of the government of a country with its manufactures, either directly or through the grant of a monopoly, does not now need any effort of the pen to expose. The wines of Portugal, left to the emulation and spirit of individuals, would have risen in estimation. They would have been divided into classes, each grower being emulative to attain the highest. High prices would have purchased wine of proportionate worth, and England would not have had to pay dearly for an inferior article. The coarse vines of Portugal would have been succeeded by those of a better and choicer character. The grower would have been enriched, and the British public, who were forced to purchase under a most specious and impolitic treaty, would have had less love for ardent-spirited wine, decidedly injurious to health. In defence of brandying the wines, the company's agents say that the English cannot have them too strong. How comes it, then, that before the company engrossed the wine trade of Oporto, very little brandy was ever used, and Englishmen did not complain? Next, they say the wines will not keep so well without brandy: this excuse is alleged for the spirit

which is mixed with the Bordeaux wines before they are shipped to England; the reply which will do in the latter case will do in the former—how comes it that Bordeaux wines are drank in Holland, Prussia, and St. Petersburgh in their natural state, and yet will not reach England pure! The truth is, that the Oporto company know what is so well known in France as to be a matter of complaint, namely, that a large quantity of inferior wine pays better than wine of the highest quality. The company, therefore, wished to bring down the fine scarcer growths, and raise up the poorer, and thus kept a medley of a very middling quality. Brandy was the best means of equalizing the two extremes. The wine could not be drunk until the vinous qualities were nearly all gone, and the brandy tamed down, and then the cheat passed off. In this way only is it to be accounted for, as may be seen in the Appendix, that three bad years together did not change the prices or quantities of these wines; nay, that the same season one class of wine was said to be good and another bad, as if in a fine season the entire vintage would not be either good or bad. Accustomed as we now are to these wines, the improvement of them is to be greatly desired, and it will some day no doubt be effected. Now it is only occasionally that a glass of very fine unadulterated port is to be met with, which seems to have got into England like the fly into amber. A worthy wine in such instances it is found to be. In the richest country in the world, it is mortifying to discover that at every inn or tavern, where enormous prices are demanded for a bottle of wine, nothing is yet to be met with, from the Land's-End to Caithness, but a coarse brandied product of the Oporto company, which in any other region but this would be flung into the still. It must be granted, notwithstanding, it meets the shopkeeper's description of good wine, who, when his "black strap" was impugned, answered, "I say it is black, and makes you drunk: is it not, then, good port wine?—what would you have?"

It is now fitting that something should be said of the districts and vineyards, the farmers and proprietors of which have been thus weighed down, and whose wines have been so sunk below their real merits by the pressure of the foregoing monopoly.

The wine country of the Douro extends along the banks of that river about fourteen leagues from the city of Oporto. The vine is very generally cultivated in Portugal; but it is from the vineyards of the Douro alone that its wines have derived a celebrity in England, through the injudicious financial measure to which allusion has been already made. The best wine of this district was capable of great improvement had competition been suffered to exist, and the market remained open. The wines of Portugal are now inferior to the wines of Spain, the sherries of which country have continued to improve, and to approach much nearer to the first class of wines than formerly. This arose not from any fault in the soil or climate of Portugal, which is admirably adapted for the growth of the vine, but from the sordid monopoly already dwelt upon.

The wine country of the Douro is called the district of the Cima do Douro, or the Higher Douro, and that is again subdivided with respect to product into, first, Factory wines, *Feitorie;* and secondly, Branch wines, *Ramo.* The sites which it affords are excellent, and the powerful sun of the south renders the failure of the crops a matter of rarity. The vine training is of the low kind, the *tige bas* of the French, and the vineyards are on the slopes of schistous hills, of most favourable aspect. No less than sixty-seven varieties of vine have been reckoned in Portugal; but in the wines made for the company, no nicety of choice has been exemplified, the favourite species is the product not of the best vine, but of that which gives out the greatest abundance of a black fruit: the leaves are exceedingly coarse, rough, and deeply serrated. The species called *Donzelinho*, *Alvarelhao*, and *Sousao*, are in much request; the *Bastardo* is one of the best kind; but

whatever are the varieties, they are all mingled together, and the wine is sweet or harsh as by accident one particular species of grape may predominate, while the choice must which the best grape might afford has its good qualities utterly wasted. It is evident, therefore, that no justice has been done to the wines of the Douro, nor have their "capabilities" been fairly put to the proof.

The grapes are trodden in vats in a slovenly way with the stalks, and while the process of fermentation proceeds, this uncouth operation is repeated. The time of fermentation varies, but it rarely exceeds seventy-five hours. The wines are then removed into tuns, containing upwards of a dozen pipes each. The wine is racked after the great wine sale in February, and carried to the cellars of the company, or of the purchasers. It is generally exported at the end of the year from the vintage. During this period it is twice brandied, the taint of which it holds until age ameliorates the wine at the expence of its natural vinous flavour and perfume. It is an effect of the admixture of the spirit, that in order to drink the wine of Oporto, with the real virtues of the grape, it must be swallowed in a fiery state from brandy; or if the consumer wishes to avoid the ardent nature of the combination, and cause less injury to his stomach, he must wait until the better vinous properties are deteriorated, and the flavour and aroma of the wine are utterly destroyed.

No valid excuse has ever been made for the practice of adding such a quantity of brandy to the wines of Oporto, in the extraordinary manner which has been the custom. The quality of Portuguese brandy is often very bad. It has frequently been distilled from figs and raisins, of which no other use could be made. They even once tried to make it from locust pods; but that scheme failed, and they were obliged to resort to importation for the extra quantity they wanted. A couple of bottles of good brandy to a pipe when put on board ship, would answer every purpose

of preservation. In some years twenty-seven thousand tuns of port wine have been imported into Great Britain, in every one of which, besides the portion of spirit in the wine, no less than from six to fifteen, and more, gallons of brandy have been artificially mingled, making, at only six gallons, a hundred and sixty-two thousand gallons of ardent spirit. To get rid of this liquid fire, the wine must be kept a dozen years, and ruined in flavour, when it might be drank in half the time by omitting the brandy. If the Oporto charge made against the English taste were true, how came it that even down to 1754 the admixture of the small quantity till then used was censured as flagitious and abominable, even by the company itself? Port wine had been drank in England for nearly sixty years, and the wines were found warm enough for the taste of Englishmen. The truth is, as already stated, that brandy and mixing aid in making all growths equal, after being kept a longer or shorter time, for the inclination of the inferior qualities always is to descend in the market, even below their worth, as that of the better is to increase. Wines of a worthless or very inferior quality have been imported to the extent of several thousand pipes in one year into Oporto, to mingle with the port wines, such as those of Anadia or Figueras. By such means, too, the wines of Oporto sent to Guernsey and Jersey are not in amount equal by two-thirds to the port sent into England from these islands as genuine wine of Portugal. This is a singular instance of the gullibility of the English people, who consume annually hundreds of pipes of wine as Portuguese, that never have been in Portugal at all. Beni Carlos, and France, through Cette make up the extra supply! By these practices, and the ease with which the mass of any people is cajoled, a taste in wine of a most extraordinary kind has prevailed in this country, among the bulk of those in the middling classes who drink wine, and who seem to prefer the juice of the grape the more it is unlike the product of simple fermen-

tation, the very excellence of which consists in the slight interference of artificial effort for completing its product, after the earth and sun have done their part.

Between 1750 and 1755, a pipe of the best Oporto wine could be bought for two pounds sixteen shillings, so low had these wines fallen, and yet upwards of ten thousand tuns were brought into Great Britain, and in 1753, nearly thirteen thousand. But in 1756 the company was formed, and the wine never fell so low again, although the consumption increased very little. Yet in 1819, 1820, 1821, and 1822, the quantity imported did not more than average the foregoing amount. The average import from 1813 to 1822 was but 12,182 tuns. From 1787 to 1810 seems to have been the high and gaining state of the Oporto trade; the company's triumph. Once in that time the importation into Great Britain reached 28,669 tuns, namely, in 1801. Twice, in 1803 and 1810, it was above 27,000. The average from 1715 to 1787 seems to have been about 12,000 tuns:—a remarkable circumstance, arising no doubt out of the advance of duties, since the increase of the population of Great Britain from 1715 to 1826, must have otherwise greatly enhanced the demand. In 1831 only 11,639 tuns were imported. In the luxury of wine, therefore, the inhabitants of England, from 1715 to 1787, were better provided than they are now, as a far greater number in proportion were able to afford wine. The excess of these wines, imported between 1787 and 1810, must be placed to the account of a stimulus given by the war, and the consumption in the navy and army. The largest vintage in the Douro was in 1804, when the best part of seventy-seven thousand pipes was made. In 1798 above sixty-four thousand pipes were exported. It is evident, therefore, that Portugal must have suffered in her export wine trade since 1810, as far as Great Britain is concerned.

The best wine exported to England is produced at and above Pezo da Regoa, which is situated in the centre of

the Upper Douro. In that place the annual port wine fair is held. When the wine grown here is preserved pure out of the company's hands, it resembles some of the Rhone growths in France, or the Côte Rôtie. The Ramo wines have little or no brandy mingled with them, and are reckoned inferior to the Cima do Douro; still the company found a dishonest use for them in filling up their casks, and completing ullage. Villarinho des Freires, Abasas, Galafura, and Gorvaens, are among the best vineyards of the Ramo.

In the province of Beira the vines are of the high growth, *tige haut*, and there they also mingle brandy with the wines. Lamego, Alenquer, and Monçaon produce the best; they are of good quality. *Vins de liqueur* are made at Carcavellos, both red and white. Carcavellos, or Lisbon, is a well-known wine in England; so is Bucellas, which comes from a vineyard near Lisbon, but is too apt to be spoiled, by being sophisticated with brandy when sent to this country. Setuval produces a dry and a muscadine wine of good quality; and Colares a good port, when obtained pure. In fact, it is easy to perceive, on examining the wines of Portugal, how much monopoly and the want of competition, as well as of science in treating their wines, have kept back the vinous productions of a territory blessed with every natural advantage.

The monopoly of the company, it may be further remarked, though it did not increase the excellence of the wines of Portugal, enhanced their price. This is the natural effect of all monopoly. It may be inferred, as will be seen, from the Tables at the end of this volume, that the demand from England has scarcely increased at all, in consequence of the high duties levied on wine here at a later period. From 1715 to 1787, the importation was about 24,000 pipes, and that is little less than the average since 1813. Yet within the first period the best wines fell as low, at one time, as two pounds sixteen shillings a pipe; and after the company was formed, though there is no

proof that the wines were at all improved, they speedily rose from their depression to twelve pounds a pipe, and then to eighteen. In 1818, when the quality was ordinary as ever, the price demanded was forty-eight and fifty pounds at Oporto! Money had not altered in value. The same quantity of wine was made and exported within both periods, and England was almost the sole consumer. It would be a very reasonable thing to inquire how this happened. Although wine from Oporto fell afterwards, it was only to a price a little lower. From thirty-five to forty-five pounds sterling was a large price for wines neither *recherché*, nor diminished by lack of product, neither improved by superior skill and capital, nor made with greater cost to any serious extent than they were fifty years before. This is a point never yet satisfactorily explained. Perhaps there was or is a predilection for dear wine among buyers, which monopolists encourage. Whatever be the cause, the public was equally the sufferer.

Events in Portugal since the first edition of this book, lead to the hope of improvement in wine growing and manufacturing there for exportation. Let the trade be free, the growers be free, and the bad local customs heretofore prevalent be swept away, and it will be soon seen that individual enterprize will effect good. Let the wines of the Douro have fair play; let care and delicacy be observed in the vintages; let the wines be classed; and there will be no fear of a noble and generous product. British capital, and a practised hand or two from the Côte d'Or to direct, and we might have wine of Porto of the first class. It is not the soil, nor the climate, but the slovenly management of the vintages, and the gripe of monopoly, that has prevented the wine of Porto from doing justice to itself. The despotism of the government has helped evils that it is to be hoped will be shortly ameliorated. A taste of what accident has yielded more than design, has shown what may be produced in Portugal, by a pipe now and then, a sort of "angel visitor" to this

country. Some excellent wine lately got over here in the confusion of political events that astonished many an old wine drinker. Such wine is a treasure, and bears a high price; but it is a rule never to be impugned, that good wine can be purchased of respectable merchants only at the most respectable prices.

Since the foregoing paragraph was written, a decree (see Appendix, No. XIV.) has been issued on the downfal of Don Miguel, which for ever abrogates that nuisance the wine company of Porto, and restores the free disposal of their vineyards and wines to the cultivators of the Upper and Lower Douro. In a future time, therefore, we may expect different classes of Oporto wine of which we do not dream now, and our wine merchants may go unshackled to market, and import as much brandied wine as they choose for those whose taste it suits, and as much of a high delicate flavour and of an unadulterated quality as good judges will take. It will be known by and by much more generally what good port wine is; the price must also come down to the consumer. This will be one advantage gained by the downfal of Don Miguel and the routing out of the monks and friars of that part of the peninsula. May every similar monopoly be speedily swept away in all countries, at home as well as abroad, and true principles of commerce triumph!

From the wines of Portugal, in the mother country, it is natural to turn to those of the colonies. Of these, Madeira and the Azores alone produce wine which is known in foreign countries.

There is much uncertainty respecting the period at which the grape was first introduced into Madeira. It was most probably stocked from the Malvasia grape of Spain or Portugal, originally from Candia; though it is stated by some it was brought thither directly from that island. Precisely the same thing is said of the Malvasia grape having been transplanted to the Canaries direct from thence or Cyprus. It is much more natural to suppose,

that as these species were grown in Spain and Portugal at the time, they were transplanted from the mother country. Chaptal is in error when he says that vines were planted in Madeira in 1420. Tristan Vaz and Juan Gonsales only discovered the island the preceding year, and called it Madeira from finding it thickly covered with wood. Prince Henry did not colonize it until 1421. The vine was, no doubt, early introduced there afterwards, and the volcanic soil was singularly favourable to its growth. Sugar canes were first planted there from Sicily, by the before-mentioned prince. The wood was a great deal of it consumed by a conflagration, kindled by the discoverers, which raged, it is said, a long time afterwards, and thus the way was cleared for the vines. It is on record that wines were exported from the island before 1460. The first colonists of North America were no sooner settled there than they carried pipe staves to the island, and exchanged them for wine.

The hills, says a writer in 1689, were then covered with vines, and the valleys with ripe grapes, which yielded a fragrant smell. It is added, the fertility of the island was abated from what it had been on the first discovery. The wines were brought to the towns in hogskins, upon asses; hence the wines of this picturesque island had formerly the *borracho* taste. They then cultivated the black *pergola* grape, and made several kinds of wine. One, like Champagne, was not much valued. A second was stronger, and the colour of white wine. A third called Malmsey, and a fourth Tinto, inferior to tent in taste, was never drank by itself, but mingled with other wines, to make them keep. The Madeira wine it is then remarked has the peculiar excellence, that it is ameliorated by the sun's heat when pricked, only by taking out the bung and exposing it to the air. When they fermented their wine, the growers are described as bruising and baking a certain stone called *jess*, of which nine or ten pounds were thrown into each pipe. The product of the vintage was divided

between the proprietors and the farmer, and the latter was said to remain poor, while the former got rich. The Jesuits at one time contrived to hold a monopoly of the Malmsey, of which there was but one good vineyard in the island. From twenty to thirty thousand pipes were thought to be the annual produce of the vineyards. The wine was drank a century and a half ago in America and the West India islands in considerable quantities. The produce was sixty for one to the first proprietors of the vineyards, from the ashes of the trees "bringing forth more grapes than leaves, and clusters of a span length:" it was called the "Queen of Islands." Indeed some of the clusters of a dessert grape there now often weigh twenty pounds.

The varieties of grape grown on the island are numerous; the *malvasia*, *pergola*, *tinta*, *bastardo*, *muscatel*, *vidogna*, *verdelho*, *cerciâl*, or *esganuacao*, *bagoual*, and others which flourish in volcanic lands. The best soil is a mixture of red and yellow tufa, called *saibro* and *pedro molle*, exceedingly light, but mingled with a clayey earth named *massapes*, and a volcanic cinder, *arraya*. The vines will bear well for sixty years. The hills are steep, and the surface of the soil generally is of a light red colour. The slopes are admirably adapted for growing the vine, but the vineyards do not appear so numerous as the stranger would expect. The implements of husbandry are rude, and the operations of the vine growers by no means so careful or neat as they ought to be. The Malmsey, of which there are several qualities is, when of the best kind, a most delicious wine. One species is reserved for the royal table in Portugal. Of the very best, little reaches England. The prime is from 90*l.* to 100*l.* the pipe, while Madeira fetches from 50 to 75 only, and lower. The best Malmsey is produced from an "avalanche of tufa," lodged at the bottom of a cliff, almost inaccessible. In some places deep trenches are dug, and ashes placed in the bottom, where there is a fear of the vine reaching a clayey

stratum below the volcanic *debris*, which has fallen from a precipice of great height. If the vineyard is on a dry spot, it is watered thrice in the summer season. Some growers use animal manure, which others reject, and as the French do, they sow lupines among the vines, and bury them at their feet every second year. The vine is generally propagated by cuttings. The cuttings from the north side of the island are preferred for the south. The vines give no wine until the fourth year, and the average produce of all the vine-land now is not more than a pipe an acre. Some of the merchants contract for the produce of the entire vineyard on the ground. They mingle the fruit of different vineyards together, assorting them in the way best adapted to the market where they are to be consumed. These wines vary much in quality, and a nice judgment is required to select the better kinds on the spot, as the word of the seller can rarely be relied upon.

The vines are planted in lines in the vineyards in front of the houses upon trellis work seven feet high. The branches are conducted over the tops, so as to lie horizontal to the sun's action. They thus afford a canopy to those who walk under them, yielding a delicious shade in that ardent climate. The stalks of the *arundo sagittata* are used for constructing the frames. On the north side of the island they are trained up chestnut trees to shelter them from the violence of the wind. The soil near the chestnuts does not seem to suit them so well as that which is of a different character. A portion of the vines is trained on frames not more than three feet high. Some fruit is grown as high as two thousand seven hundred feet of elevation, and wine is made at two thousand. They prune their vines in February and March. The flowering takes place about two months after the pruning.

Mr. Bowditch, who was there in 1823, says the wine of the first quality, which is called *pingo*, is that which arises from the treading only, in the vat or trough, by bare-legged peasants. The wine is then pressed, in the same trough,

with a lever like a cider-press, to the fourth operation; this is called *mosto*. The vintage is in September, except for Malmsey. The fruit is sorted. The fermentation takes place in the pipes, and gypsum is used during the fermentation, unless the vintage happens to be green. The fermentation generally lasts six weeks.

The must is agitated while the fermentation proceeds. They ripen and mellow their wines in stoves, which they keep in a temperature from 80° to 90° of Fahrenheit, by which they save six years of age; but a sea voyage gives a preferable quality to the wine.

An agreeable sweet wine is made in the island by checking the fermentation, and adding brandy to the must. The wine from the muscatel grape is never exported. The sercial is said to be the product of the hock grape, transplanted to the island. The leaf is of a light yellowish-green and downy. It is one of the last that ripens, and requires to be kept a good while before it attains perfection. Only about forty-five pipes of sercial are made annually upon the average. The Malvasia, or Malmsey, is of the finest quality. Of this there are three kinds, produced from three varieties of the plant; that from the *cadel* is considered the best. All the Madeira wine of the first class is produced in the southern part of the island.

The Tinto wine resembles Burgundy when new, but is said to be softer. When old it loses its colour, and takes that of rich old Madeira, retaining its own for not more than two years. It has an agreeable perfume, and is a genuine wine. It is said to be very astringent, and to be an antidote in dysentery. The vineyard where the best is produced is called Fagaa-do Pereira. Calhota and Santa Antonia produce wines of the same class.

The produce of the island is reported to be about twenty-five thousand pipes, of which not more than three are of prime quality. Of these, about five thousand, of all kinds, reach England. Brandy is not allowed to be imported into Madeira, even from Portugal; that which they

require they make themselves. For what object this prohibition exists, it is difficult to tell, as the wines of Madeira always receive an admixture of brandy on exportation, the growers say, to enable them to bear the long sea voyages to which they are subjected.

Madeira wine must attain age on the island, if it be not sent a voyage to a warmer climate, to gain its utmost excellence through a perfect decomposition of the saccharine principle. The expense of a voyage to the East Indies for this purpose is superfluous, as motion and heat will do it in any climate, and complete the decomposition of the principle which tends to fermentation. This must not be done too suddenly, as some imagine; a year is probably the least period in which it can be effected. In the island of Madeira bottles of wine are said to be plunged into a trench filled with fermenting horsedung, being first well corked, and in a few months the maturity of a voyage is gained. This is very doubtful. It is not the temperature alone that will produce the effect desired in a short time; agitation is necessary. Of the good effects of this in the first fermentation, the wine grower is sensible, or why does he agitate his must? In the further decomposition of the saccharine principle it must be equally grateful. A pipe of Madeira has been attached to the beam of a steam-engine, in the engine-house, where the temperature is always high and the motion continual, and in a year it could not be known from the choicest East India.

Madeira wine is one of those which bears age remarkably well, and the wine has not yet been drunk too old. Its flavour and aroma perfect themselves by years. There is no mixture of any kind, but a little brandy on exportation, made to Madeira wine of the first growth for any purpose whatever. Almonds and various additions are used to bring up the character of the inferior growths to the standard of the first, and impose them upon the world for that which they are not. Some imagine the character of the wines to have deteriorated of late years, but there

seems no reasonable ground for the supposition. Inferior growths have been imposed upon buyers for those of the first class, and there was naturally a reaction, as there must be with sherry wines from the same cause, namely, inferior classes having been forced into the market from an unnatural demand.

The Azores produce about five thousand pipes of wine. The best are called *Vino passado*, a Malmsey, and *Vino seco*, a dry wine. These are grown at Pico. As long ago as the year 1639, these wines were described as they are now, and their inferiority to the wines of Madeira was also acknowledged.



The Italian Vintage.

CHAPTER IX.

THE WINES OF ITALY AND THE ISLANDS.

GENERAL CHARACTER OF ITALIAN WINES—VINE CULTURE—CAUSES OF NEGLECT IN THEIR MANUFACTURE—VARIATION—SICILIAN AND ELBESE WINES.

The wines of Italy have not obtained that character which might be expected, if the excellence of the grape, and the congeniality of the climate to the culture of the vine, be duly considered. The wines of modern Italy are all made for home consumption. The interests of commerce, which lead to competition, have not yet interfered to improve them. England, amidst her traffic with all the world, drew from Italy raw silk and oil, but held out no premium for the improvement of Italian wines by a demand for them. The exchange of a few pieces of woollen goods with a nation, not less insignificant for extent than

trade and population, excluded the English from exciting fifteen millions of Italians to improve their wines, yet does Italy take annually nearly five millions in British goods, while Portugal only absorbs two millions and a half in exchange for a deluge of coarse wines and her friendship, which are pretty much on a par in value. It is singular that statesmen do not see, when they talk of national friendships, that there can be no such thing, and that the law of interest is the sole bond of political relationship;—but this is foreign to the subject. That Italy does produce good wine is undeniable, as well as that she grows a vast deal of what is very bad. There are many causes which contribute to this, besides the want of a stimulus from commerce. The petty sovereignties of Italy are a blight upon her manufactures no less than upon her civilization. Many of these are shut up to themselves, as regards their productions, and cannot interchange with the neighbouring states without a great disadvantage, owing to pernicious duties, high beyond all reasonable limit compared to the value of the article.

It is not, therefore, because England imports no wine from Italy, the opinion is to be entertained that there is no good wine grown there; nor because the Venetians imported Cyprus wine in considerable quantities, are we to conclude there was none in Italy. That the growths of Italy are not what they ought to be, or what they might be made, no one can deny. A vast deal of vine fruit is grown in a mode subsidiary to other produce. Wine[1] is made in a defective manner, but it satisfies the home consumer, and this being the only object of the farmer, he is careless of improvement. No part of the process among the generality of the country people is managed with the slightest care, but a great lack of judgment is universally displayed. Besides, what object has an Italian in labouring to improve that which cannot by

[1] *Vino, vinello, vinetto, vinettino.* Wine weak and very weak.

improvement turn out of the slightest profit to himself. Trampled by the Austrian military, or by the feet of native tyrants, destitute of adequate capital, and weighed down by a vexatious system of imposts, what has he to hope for by carrying towards perfection an art which can bring him no possible benefit? In Tuscany, indeed, things are somewhat better for a moment; but unless the stimulus of gain and a generous emulation can be substituted for labour without prospect of reward, no improvement can be expected to take place throughout Italy generally. A fine climate, to which the vine seems wedded, produces a large quantity of rich fruit with little trouble, and why should the peasant not enjoy, without extra care and labour, that which on his bestowing them will yield him no additional benefit.

There are places, however, where very good wine is made, and something like care bestowed upon its fabrication; but these exceptions are the result of the care of the proprietor for his own individual consumption. The curses of a foreign yoke and of domestic exaction blight the most active exertions, and render that land, which is the gem of the earth in natural gifts, a waste, or a neglected and despoiled heritage to its inhabitants. The Italians would soon make good wine, if good wine would repay the making—if they might reap that reward due to industry and improvement, which common policy would not withhold in other countries. The peasantry generally are not an idle race.

In particular districts in Italy it is by no means a rare thing to meet with good wine. The general neglect of a careful and just system of culture, and the want of that excitement which interest creates, have not prevented the capabilities of the Italian vineyards from being known. In certain instances much care is bestowed upon the vine. In spots among the Appenines, the vines are carefully dressed, terrace fashion, and were they well pruned, and the fruit taken in due maturity, and regularly sorted,

which it rarely or never is, a vast deal of excellent wine might be made, without altering any thing essential besides, in the present system of vine husbandry. There is good bodied wine to be procured in Naples for two pence halfpenny English a bottle, and at Rome and Florence for four pence. In Calabria, so far is the system of high vine training from being prejudicial to the mere ripening of the grape as in the north, that they are obliged to shade the vines from the sun, lest in that volcanic territory the grape become too ripe, shrivel into a raisin, and be only fit for making wine of the thickest and sweetest kind.

We have no means of knowing what the taste of the ancients was in the product of the vine, the allusions of the ancient poets furnish nothing definite: all is general, and no modern conjecture can be proved just. It is to be inferred, that the wines of Tuscany have not been much altered since the time a more modern poet, Redi, wrote his *Bacco in Toscana.* The most probable thing is, that the Italian wines have stood still and remained without improvement, while those of France and Spain, (the latter country being, in the most prominent examples, indebted for it to Englishmen,) have kept pace to a certain extent with knowledge, and the increasing foreign demand. Moreover, there is a fashion in wine, as in everything else, and no standard exists for judging its caprices.

The system of training thoughout Italy is the high method, though in some parts of Piedmont, Naples, and even in Tuscany, there are vineyards trained in the low manner, and pruned. It is not, however, to the mode of training, that the inferiority of the greater part of the Italian wines is to be ascribed. Corn is sown between them, or other grain, or vegetables are grown. The vines are planted upon soils oftentimes the least congenial to their growth, as in the plain of Pisa. They are suffered to run up to any height, and in many places are never pruned at all. In the Roman States the vines producing every quality of wine grow together, without assortment of

any kind. They are conducted from tree to tree, generally of the elm species, along the boundaries of inclosures, and even by the high roads, where they run up in wild luxuriance, and waste their vitality, not in the fruit, but in leaves and branches. Even where the vine is raised on trellis-work or on poles, it is rarely pruned or trained. In some parts of the Appenines, where a better system prevails, even there corn is sown between the rows, and the dressing is of the richest and grossest kind, highly pernicious to the flavour of delicate wine. Still there is excellent wine to be drank in Italy in particular places, in the literal sense of the term, and potent wine too, though the inveterate drinker of Oporto brandy-wine might find the same defect in it as he discovers in the finest growths of Burgundy or the Bordelais.

But if the Italians neither prune their vines, nor consult the proper soil for their culture, nor refrain from making them secondary to the other productions of the earth, they are still more censurable in their mode of conducting the process of the vintage. Neither slenderness of capital, nor the iron grasp of foreign or domestic tyranny, can bear any portion of the blame in this respect. The grapes, after being trodden, are all thrown together in the most slovenly manner; ripe and unripe, sound and unsound, are commonly intermingled, and flung into vats that remain uncleaned from the last year's vintage, the press being rarely used. The process of fermentation is conducted in the most careless mode. The must is not suffered to remain without fresh additions, until the vintage is over. Whilst in France they will only suffer the pressure of one day's gathering to ferment together, the Italians will throw in fresh must in the height of the process. That wine so made, whatever may be the defects in cultivating the vine, could ever be of tolerable quality, is not to be expected. There are some land-owners, however, who possess excellent wine, which they have been at considerable pains to manufacture, but then it is not to be drank beyond their

own families, and has no connexion with what is commonly sold in the country in respect to quality. If the vintage were as well conducted, and the same pains taken with the must as in France, very superior wines would be the result, for the climate is matchless.

Some of the best wines in Italy are found in the kingdom of Naples. The soil there being volcanic is eminently adapted for the vine. These wines are chiefly of the luscious kind. The site is favourable for growing the dry wines, had it been undertaken by the inhabitants with proper care, and with due attention to the most kindly places for vineyards. Some parts of the Neapolitan territory differ in temperature very considerably. In Calabria, though certain places are too warm for vineyards, others are exceedingly well adapted to every species of vine. Some of the wine grown there is strongly tinctured with sulphur from the soil.

The principal wine grown in Naples is the Lacryma Christi, a sweet or rather luscious wine *(vin de liqueur)*, which holds a place in the foremost rank of the first class produced by any country. Very little of the genuine wine is made even in the most favourable years. It is an exceedingly rich variety, of a red colour, and exquisite flavour. Vino Græco is a sweet wine from a grape of that name. A white muscadine wine, of fine colour, delicate, and rich in perfume, is also made near Vesuvius. At Pausillipo there is a very palatable wine. The grape of the Vino Græco, which is a favourite for cultivation, is said to have been brought from Greece. A good deal of Lacryma Christi, of an inferior quality, grown in various places around Vesuvius, as at Torre del Græco and Novella, is exported as the genuine wine. The best is grown at Galitta. At Gierace, about forty miles from Reggio, an excellent wine is made, which seems to partake of the lightness of the French, mingled with *vin cuit*. At Baia and Tarento both muscadine and dry wines are made of good quality.

The Lacryma Christi of Naples is said by some to be

the Falernian of Horace, as if any thing like precision could be attained from the poet's description of the luxury in his existing works. Writers for the last five hundred years have had different opinions on the subject, and all are of equal value. Many assert Monte Messico to be the place of its production. Brydone says it was grown in the present desert spot called Monte Barbero. There are others who think it was made about sixteen miles from Capua, on the hills near Santa Agatha. It was of this Lacryma wine that a Dutchman exclaimed, "O Christ, why didst thou not weep in my country!"

A white *mousseux* wine, having a pleasant sharpness, is made on the Campagna, called Asprino. It is accused of acidity, and certainly does not suit a northern stomach. The islands in the Bay of Naples, all of them produce wine; that of Caprea of very good ordinary quality. At Reggio two kinds are made from the same grape, a muscadine and dry wine. At Carigliano a muscadine wine with a flavour of fennel is grown. The shores of Lake Averno and the hills near Maria de Capoua produce both red and white wines, some of which are nearly equal in quality to those grown on Mount Vesuvius.

The wines in the Roman states are generally common, but several of them good. The better kinds, most probably from negligence in the manufacture, will not keep; though in the country they are thought excellent. In Rome most of the best wines of Italy are consumed. Many of them drank there are of the sweet kind from Tuscany, Naples, and Sicily. Of the home growths, that of Albano takes the first place. It resembles Lacryma Christi. Another is the Monte Fiascone, of a fine aroma, and intoxicating. It is grown near the Lake Bolsena. It is this wine which is also called "*Est Est*," from its having caused the death of a bibulous German bishop, named Defoucris, who was so fond of good wine that when he travelled, he sent his valet forward a post, with instructions:—"That he should taste the wine at every place

where he stopped, and write under the bush the word 'est,' 'it is,' if it was tolerable, and 'est, est,' 'it is, it is,' if it was very good; but where he found it indifferent, he should not write up any thing." The bush is a bunch of evergreens, hung up over the entrance to a house to show that wine is sold there. Defoucris's valet arrived at Monte Fiascone, and approved so much of the wine, that he wrote up, "est, est." His master soon followed, found it so palatable that he got drunk, and repeating the experiment too often, drank himself dead: his valet wrote his epitaph as follows:

"'Est, est,' propter nimium 'est,'
Dominus meus mortuus 'est.'".

Which may be rendered—

"''Tis, 'tis,' from too much ''tis,'
My master dead 'is.'"

Orvieto produces excellent muscadines of good perfume and flavour, and also some dry wines. Their sweet wines the Italians call *Abbocati;* their dry they denominte *Asciati.* Of the former kind are the Moscatello, Aleatico, and Vernaccia, a white wine of considerable note among the writers of Italy, all made from the common vines of the country. No system is adopted in preparing them; but every vine grower pursues his own method. Both high and low training are practised in the Roman states, though the wine made close to Rome is as bad as any in Italy. The most delicate wine is produced at San Marino, called Muscatta. Imola, near Bologna, is remarkable for its boiled wines. These in their natural state are effervescent, like Champagne. At Bologna they boil most of their wines, which are then called *vino cotto*, the unboiled they call *vino crudo.*

In the better days of our Lady of Loretto they had a cellar of remarkably good wine there for the use of the faithful. The Church, as was her custom, exhibited her

good taste, constantly keeping up a stock of not less than a hundred and fifty tuns for this purpose. The wines of Vicenza had once a good name; they were styled, in the way of the Italians, who love epithets, "dolce et piccante." "The wine of Vicenza, the bread of Padua, the tripe of Treviso, and the courtezans of Venice," were formerly said to be the best of their kind in the world. On the shores of the Lake of Garda they make a sweet wine, like Canary, of prime quality, called Vino Santo. It is not extracted from the grapes until Christmas, and is drank at the following Midsummer. In Parma and Placentia they grow wines which are very unpleasant, from having a strong taste of honey. Brescia has some tolerable red wines; among them is that which they call Toscolano, thought good in intermittent fevers. It is a durable wine compared to most others in Italy, as it will keep twenty or thirty years. At Castiglionè they have a Vino Santo of a golden colour, which is not fit to drink for four years, and then bears some resemblance to Tokay. In the Veronese they make a poor muscadine. The dry wine there is flat and bad, and appropriately named "Vino Morto." Lombardy produces some tolerable light wines. At Pavia a dry *mousseux* is manufactured of no great note.

But Tuscany is considered the country of the vine in Italy, and so much has the notion been cherished by the natives, that "Corpo di Bacco!" is the common oath of the lower classes. The poet of the Tuscan vine, Redi, with his "Bacco in Toscana," has enumerated his country's wines as if they were the first in the world, and gives the palm to the "manna of Monte Pulciano," *la manna di Monte Pulciano*, a sweet wine of the second class; which has the stain on its character of having killed a churchman, who drank of it too magnificently, unless an error has been made by confounding it with Montefiascone.

The treatment of the vine is much better in the Tuscan states than in other parts of Italy. In Florence even the nobles sell their wine by retail from their palace cellars.

The term "flask of wine" is essentially Tuscan, the wine being served out to the consumer in vessels so denominated, in shape that of a well-known oil vessel. A flask holds about three quarts. When filled a little oil is put into the neck, which keeps the wine effectually from the air, as was a custom in ancient times: when it is to be poured out a bit of tow is first inserted to draw off or absorb the oil from the surface of the wine.

The luxuriant vines of Tuscany are almost all of the high training, and the wines are made in some places with considerable care. The hill wines only are good, those of the plains are generally poor, and of Lecore proverbially so. The plains were once forbidden to be planted with vines. Among the nobility and landowners excellent Tuscan wine will be found, which has been made under their own superintendence. The liberal character of the government—liberal compared to other states in Italy, where so much of the soil is ruled by foreigners—has exhibited its advantages even in the manufacture of so common an article, for it has excited emulation among the better classes of society. At a Tuscan villa, the owner will, with some degree of pride, extol the vinous growths from his estate, and mention the efforts he is making to increase the excellence of the produce. They who introduced Lancastrian schools, gas, and steam machinery into Austrian-Italy are exiles or in dungeons—a Porro, Gonfalionieri, or Arrivabene; and it is something to find that a Tuscan nobleman may introduce improvements on his lands, borrowed from more enlightened countries, without individual hazard, and that a generous ruler, in the person of the grand duke, set the honourable example himself. Without any excess, all classes in Tuscany enjoy their wine, fancying it makes good blood; in the words of their poet—

"Il buon vino fa buon sangue."

It has been remarked that no two travellers agree about the merit of Italian wines. This often arises from the

same names being adopted in different Italian states for wines of very opposite qualities. There is a *vino santo*, for example, in the Roman states, and a vino Græco. There are wines of the same name in Naples. Even a wretched Veronese wine, truly "vino debolissimo e di niuna stima," is called "vino santo," while there is an excellent "vino santo" at Brescia. It is the same with half a dozen of the most noted wines of Italy, and unless the place of growth be annexed as well as the name, one traveller will praise a wine of the same appellation as that which another pronounces execrable. There is no other guide than the place of growth to make the quality clear, for though the wine is often called from the grape of which it is made, as vino Græco from the Grecian grape, even this is not uniformly the case.

The celebrated Verdea is a white wine, having a bright green tinge, grown at Arcetri; it was formerly held in high esteem. The plain of Pisa produces poor weak wines unworthy of Tuscan neighbourhood. The red wine of Chianti, the wines of Val di Marina, Carmignano, Poncino, Antella, Artiminio, and others of the same class, are produced not far from Florence, and are several of them excellent. The wines of Sienna—among them Montelcino, Rimaneze, and Santo Stefano—are good wines *de liqueur*. The "Aleatico" of Tuscany resembles "tinto," and is a red muscadine wine, made near or at Monte Pulciano. It is a wine of great excellence, luscious, with a rich perfume. The Malvagia wine of Trebbio is a very fine variety. The red Florence wine, as it is called, is deeper in colour than claret, and harsher, being left long on the murk.

It has been observed that near Ravenna, on land recovered from the Adriatic, the vines attain an extraordinary size. From Verona to Vicenza it is the custom to plant the trees lozenge fashion. In Lombardy they are planted in the same manner, for the support of the vines, and between Bologna and Modena. The soil in Lombardy

is, however, far too rich to produce good wine. In the north, from Bassano to Trent, the valleys abound in vineyards, but the wine is of too luscious a character to be drank by any but the inhabitants. The vineyards here were formerly so pestered with bears, which devoured the fruit, that they were obliged to erect straw huts upon the top of a post, just large enough for a man, from whence he shot the animals without being perceived.

There is almost an endless variety of grape used in the wines of Italy, without regard to the quality. The *mammolo* is a red grape, much grown at Florence; the *canajuol*, a black Tuscan variety; then there is the *moscatello*, from *mosca*, a fly, whence also muscat and muscadine, from the ancient name of wines *apianæ*, according to Redi; the *Barbarossa*, or red-beard, so called from its long clusters of red fruit; the *malvagia*, or *malvasia*, from the Morea; and the Greek grape. The wine of Chianti comes principally from a creeping species of vine, *vite bassa;* there also is the *vernaccia* and *aleatico*, with numerous other kinds, many of them of the first excellence.

Chianti wine was formerly imported into Great Britain before that of Oporto had nearly excluded every other species, and the red wine of Florence continued to arrive after the importation of Chianti had ceased. The last was most probably sold for adulterating or mingling with other growths, to give them body and colour, and deceive the purchaser. It does not appear that a single cask from that country is imported now, though Sicilian wines are constantly introduced. While the wines of France, so superior to all others, are admitted at the same duty, there is little chance for such as are of a quality at best only tolerable.

Savoy and Piedmont produce red wines of tolerable quality; those of Montmelian and St. Albero, in Savoy, are among the best in the country, and come from the slopes of Mont Termino and St. John de la Porte. One of these wines is denominated clairet, from being fermented but a short period: there are several other red wines. The

best *vin de liqueur* is made upon the Rhone, near Chamberry, from a Cyprus species of vine. An effervescing wine is made at Lasseraz from the malvasia grape. Asti, near Marengo, and Biella, produce red wines of tolerable flavour. At Asti, the plants called *Passaretta* and *Malvasia Nebiolo* produce *vins de liqueur*, with the smell of the raspberry. The wine of Montferrat, near Marengo, is esteemed; the red is deep coloured and intoxicating. The wines of the Genoese territory are of little repute. In that city there was formerly a monopoly of wine by the government, and the innkeepers were obliged to purchase of their superiors. It was upon this account, most probably, that a church was built to our Lady of the Vineyards, the monopolists, as monopolists will, turning religion to account for lucre's sake.

In Sardinia, the produce of the vine is very abundant, so that the fruit is frequently left upon the vines for want of vessels to hold the wine. An amber-coloured wine called Nasco, and a red wine named Giro, are the most remarkable. There are also several sweet and ordinary wines. The wines called Caunonao, Monaca, and Garnaccia, are exported to Holland and Russia.

Elba grows a little red wine, and of excellent quality. A hundred vines will produce from twelve to fourteen barrels on the average. The older the vine the richer is the wine; some are one hundred and fifty years old. The hermitage of Monte Serrato and the environs grow Moscatello wines. The Aleatico and Bianillo of Elba are red Moscatello, and resemble Monte Pulciano when it has lost its peculiar odour. They make there a champagne of the *Procanico* grape. They have also a wine called Bischillatto. The Elbese wines will bear a sea-voyage well; some have been exported to America without injury. They plant their new vineyards in December, and are assisted in their vine culture by labourers from the neighbouring coast of Italy. It is remarked, that the wine made from the vineyards in the valleys of the island

will not keep long, while that from vines grown on the hills is durable. The soil is a red sandy stone. Little is known of these wines in England, but as the taste for port wine, even in the middle circles, is said to be on the decline, it may be hoped that a variety from other countries will supply its place; by this means competition will be excited, and wines of greater excellence be produced to exchange for our manufactures, from places hitherto little known here for the cultivation of the vine. The Lipari Isles have tolerable wines of the ordinary class. Their Malmsey is excellent; that drawn from the volcano Stromboli is held in much esteem, and nearly all exported.

Sicily produces wine in great abundance; but the same remarks which apply to the bad husbandry and vintage of Italy will apply to this island. The best wines of the province of Mascoli grow on Etna, and are red, being almost the only good red wine of the class in the island, though others are produced at Taormina and Faro, but they have a taint of pitch. Syracuse produces over its mouldering remains a red muscadine, equal to any other in the world, if not superior. A white *vin de liqueur* is also made there, but only of the second class. Messina furnishes much wine for exportation. The Val di Mazara and its vineyards give wines known in England. The Marsala, when obtained without the admixture of execrable Sicilian brandy, is an agreeable wine, something like Madeira of the second class, and of great body. Augusta produces wine having a strong flavour of violets. The Sicilian wines may be said to have received more attention since the closer connexion of England with the island took place. The soil is excellent, and when the true interests of the vine owners and merchants are clearly seen by them, growths may be obtained which will considerably add to the variety of the table, while their strength will meet the class of persons who can only relish the most fiery wines, for of this class are all those with which commerce has yet furnished Great Britain from Sicily.



Wine Vessels.

CHAPTER X.

WINES OF HUNGARY, AUSTRIA, STYRIA, AND CARYNTHIA.

HUNGARIAN VINES—CALCULATED PRODUCE—PRACTICE AT THE VINTAGE—DIFFERENT KINDS OF WINE—PRINCIPAL VINEYARDS—AUSTRIAN WINES—CARYNTHIAN AND SCLAVONIAN.

The wines of Hungary have long enjoyed a well-merited fame, and though no great variety is known at least of such wines as go to foreigners by exportation, they rank so high in the highest class of the products of the vintage, that they have borne the name of Hungarian wine far beyond where it has ever been tasted or seen.

It is pretended in the country, that Probus first introduced the vine into Hungary from Italy, planting it near Mount Almus; but it is far more probable that it passed from Transylvania, and came into the country from the north-west of Asia. The produce of the wine districts of Hungary is estimated at eighteen millions of eimers, of ten gallons each, or above one half grown in the whole Austrian empire, which Blumenbach calculated at nearly thirty-three millions of eimers, or 2,522,955 pipes of a hundred and twenty-six gallons each, somewhat less than

a third of the quantity produced annually in France. The vineyards which produce the best wines are those of Ofen, Pesth, Tokay, the Syrmia in the south, Groswarden, Erlon, and Warwitz in the Bannat. The consumption in the country is very considerable, and a great deal is exported. In 1807, the common Tokay, Tokay Ausbruch, and Ausbruch of other kinds, amounted in value to 657,762 florins, including thirty thousand eimers of superior, besides 2,813 casks of common Tokay. The great fair for the wines of Hungary is held annually at Pesth. Great encouragement is given by the government to vine cultivation. The Hungarians enjoy their wine, and generally carry a flask on their journeys called Csutora. Their songs dwell much on their wine of Tokay: they sing that their

> "——Muses, young and laughing,
> Dwell in vineyards of Tokay."

The manufacture of the wine is very coarsely carried on by the peasantry, who are, notwithstanding their want of care and system, very observant of cleanliness in all that concerns the vintage. The wine presses and vats are well cleaned with boiling water, in which vine leaves have been steeped. The fruit is collected in wooden vessels, which are carried by the labourers, and overseers attend to see that no grapes are left on the vines. The different gatherings are collected in vats having a double bottom, the uppermost of which is pierced with holes for the juice to pass through, while the grapes are beaten and bruised with a stick. When the upper vessel is full, its contents are taken to the press. They generally divide the gathering for the red and white wines, but do not reject the bad grapes. All are pressed together, and the must thrown into a large vat to ferment. When the grapes are too abundant for the operation of pressing, they put them into sacks and tread them out, and the contents of the sack are afterwards put by for distillation. The red grape is seldom

pressed at all. Cattle are fed on the refuse of the press. The Hungarians reckon sixty varieties of grape.

The vineyards in Hungary are permitted to be purchased by the peasantry. They are obliged to pay a tenth to the lord of the soil, which is considered a heavy tax upon their industry, and they are kept in a state of miserable poverty by their lords and rulers. The price of old Ofen wine at Pesth, in 1813, was from fourteen to twenty florins the eimer of about ten gallons. New wine from eight to twelve, and common wine from six to eight. In 1814, old red Ofen wine was from thirty to forty florins, and old white from thirty-two to forty-five. Five pence a bottle, which is about the price in 1814, was much dearer than the wine had been for preceding years. About thirty kinds of Hungarian wine have been reckoned. The most celebrated is the Tokay, the product of a district around the town of that name, extending about twenty miles, called the Submontine or Hegyalla, in High Hungary, in the county of Zemplin. Throughout this district the grape is large, and of a rich luscious taste. The best grapes in Hungary are those of Virovichitz, near Vacia.

To return to the Tokay. The grapes for this wine are the Hungarian Blue, when ripe called Trockenbeeren;† being collected late in the season, and almost shrivelled up to raisins. They are carefully picked one and one. The species called *Formint* and *Hars-levilii* furnish the prime Tokay, called Tokay Ausbruch. The vines are reared pollard fashion, and the vintage seldom takes place before the end of October. The Trockenbeeren are by that time over-ripe, and are carefully placed on a table grooved, from which the juice runs into earthen jars, and forms the rich "essence of Tokay," from their own pressure. This wine is like the syrups of the south of France, and is set aside by itself. The quantity made is small and very thick, and is considered most precious. The grapes are then trodden in a vat with the naked feet, and a small portion of wine essence is added to the must, which is

† Anglicè = dry berries or grapes.

allowed to stand twenty-four hours, and then set to ferment. This last is the famous Tokay wine, or Tokay Ausbruch *(ausbruch*, or flowing forth of the syrup). It ferments for two or three days or more, during which it is stirred, and the matters which arise to the surface are skimmed off. It is then strained into casks. Tokay has a powerful aroma. It does not become bright for some time after it is in the cask. Tokay Ausbruch contains sixty-one parts of essence, and eighty-four of wine. The Maslas is a more diluted species of the Tokay, containing sixty-one parts of essence, and a hundred and sixty-nine of wine.

The best wine of Tokay has so peculiar a flavour of the aromatic kind, and is so luscious, that the taste is not easily forgotten. This wine sells in Vienna for twelve pounds sterling the dozen. The vineyard belongs to the Emperor and certain of the nobles; that called Taiczal produces the best. The side of the slope on which the vineyards lie, is about nine thousand yards long; but the choice portion called Mezes-Malè, is but six hundred, and is reserved with its produce for the Emperor and a few of the nobles. Tokay and Mada come next. The vineyard of Tallya is reputed to have most body, and that of Zambor the greatest strength. The wines from Szeghi and Tsadany are the most aromatic, while the wines of Tolesva and Erdo Benye are best for exportation. Tokay cannot be drank under three years old. The wine ferments in the casks on transportion by sea, and thus clarifies itself. In bottling, a space must be left between the cork and the wine, or the bottle will break. In Hungary a little oil is poured upon the wine, it is then corked and a piece of bladder tied firmly over the cork. At Cracau this wine has been kept of the hundredth vintage. The new is called there, *vino slotki;* the old, *vino vitrawno.* The colour of the prime Tokay should not be of a reddish hue, though there is an inferior sort of that colour; the taste soft, and not sharp or acrimonious; it should appear oily in the glass, and have an

astringent twang, a little earthy. The aroma, however, cannot be mistaken, as that of no other wine resembles it. Almost all the wines sold as Ausbruch-Tokay, are the produce of the Tokay vineyards in general. St. Gyorgy, Œdenburg, nine German miles from Presburg, and Rust, Menes, in the county of Arad, and other vineyards, produce an Ausbruch-Tokay of tolerable character. Gyængyæsch, near Mount Matra, produces red and white wines.

The wine of Buda is red, and was once a favourite wine in England. The Sexard resembles Bordeaux; the Groswarden wine is of excellent body; Warwitz, in the Bannat, produces wine which resembles Burgundy. The red Méneser wine is very good, and with Menes Tokay is grown upon a range of hills of clay slate, so called from the village of Menes. Some of the strata on which the Tokay is grown differ, but all consist of substances favourable to the vine, and many are volcanic. There are numerous other wines of various qualities never exported.

The wines called Palunia and Tropfwermuth pass under the general name of Wermuth. They are a preparation of grapes with wormwood, seeds, and spices of different kinds, over which they pour old wine and cork it up. It is drank at home, and rarely exported.

The vineyards of the Ausbruchs and the Maslas pay no tenths to the lord of the soil. The tenure of the peasant is generally only the good-will of the lord. Many of the estates are but temporarily occupied about a month before the vintage. The proprietor at other times leaves his house and vineyard to the care of a peasant, for which his wages are increased. The vintage is over early in November. The vine cuttings are taken away, the poles removed, and in some places the vines laid in and covered with earth, all being prepared before the first snow falls upon the land. The average produce is almost a hundred thousand eimers.

The wines of Tokay were at one time not permitted to be made beyond a certain quantity in a limited district.

The Tokay essence is enormously dear, and even in Vienna is rarely to be tasted at the tables of the opulent. The practice of mingling the essence with the common wines has given the latter a celebrity, which they scarcely deserve, and lessened the quantity of the essence sold. These wines have a harsh taste, which is highly esteemed in some parts of the continent. The genuine Tokay is not commonly exported in wood, but frequently in bottle. The bottles do not contain more than a pint and quarter English; perhaps what is called in Hungary a "media," eighty of which make the small barrel denominated "anthiel."

The value of Tokay is another example of the caprice of taste or fashion in wine. The rich muscadine of Syracuse, or the lagrima of Malaga, seem in every respect equal to it in richness; though the peculiar flavour in the wine of Tokay will easily distinguish it from them, yet that flavour itself has nothing more than its singularity to recommend it. Few Englishmen would prefer Tokay to wines very much its inferior in fame, did they dare to contradict the decision of fashion in its favour.

The Austrian wines are almost all of a very poor quality. Burgundy vines were planted in Bohemia, but the red wines made from them will not keep beyond the first year. Some tolerable wine is produced at Poleschowitz, in Moravia. In Austria Proper the best are grown in the neighbourhood of Lichtenstein. They are stronger than Rhine wines, are of a greenish hue, and may be drank young. The mountain wine, to the south of Vienna, called Giberwein, will keep thirty years. The best wine next to the Hungarian is made in Transylvania. An Ausbruch, resembling Tokay, is grown there; and some very good wines are made near Birthalmen. In the Tyrol and vicinity of Trent much common wine is made of excellent quality; but it is all consumed in the country.

In Carynthia wines resembling those of Italy are produced, particularly near Moettling and Wipach. The Luttenberg wines of Lower Styria are among the first in

Germany; those of Sansal and Wiesel are much extolled. In Istria good wine is also made. Prosecco, Antignana, St. Serf, and Trieste, produce both red, white, and *mousseux*, well flavoured. Berchetz is a wine grown on a rock in the Adriatic, sweet, and of a deep red-colour. *Vins de liqueur* are made at Capo d'Istria, Pirano, and Citta Nova, called St. Patronio. Piccoli, Petit Tokai, and St. Thomas, are very excellent wines of their class. At Friuli much good wine is made; and that of Corregliano is highly esteemed at Venice. The luscious wine made at Piccoli, is equal to the vino santo of southern Italy.

Syrmia and Posega, in Sclavonia, produce red and white wines of good flavour and strength. The neighbourhood of Carlowitz is noted for its red wine. The wines of Croatia are made best at Mosyvina, and resemble Burgundy. In Venetian Dalmatia they make a wine at Sibenico, called Maraschina, whence the name of the liqueur Maraschino di Zara in the same territory. In Moldavia the best reputed vineyards are near Cotnar. The wine of that name is green, and becomes deeper by age. It is nearly as spirituous as brandy, and by many is preferred to Tokay. Much wine is sent from this province to Russia. In Wallachia they have light wines of no great repute; those of Piatra are in much esteem. The best wines of Ragusa are produced at Gravosa.



Bacchus and Demeter, from a Cameo.

CHAPTER XI.

THE WINES OF GREECE.

GREEK WINES GENERALLY—WINES OF THE ISLANDS—CYPRUS WINE—WINE OF THE COMMANDERY—MODE OF MAKING, AND QUALITIES—WINES OF THE IONIAN ISLANDS—OF ALBANIA, ROMANIA, AND OF THE RUSSIAN DOMINIONS.

On the wines of the ancient Greeks conjectures may be formed of numerous kinds, and all equally idle, from the impossibility of demonstration. That they preferred old wines to new, that they mixed water with their wines, and sometimes used them perfumed, that an habitual drunkard was considered infamous, and that the names of some of their wines may be found in the works of the writers which have reached our time, together with the names of the cups or vessels out of which they quaffed the juice of the grape, is familiar to every incipient scholar. Of the quality and taste of the wines of ancient Greece the moderns know little, nor from any thing which has

come down to the present day, does it appear that aught which can be of the least advantage to our age, is made known respecting the treatment of the vintage or culture of the vine. It is to useful information, rather than to the gratification of curiosity, that this volume is directed. The manufacture of wine in Cyprus at the present hour, which is described at length in this chapter, is that which, it is most probable, resembles nearest the general conduct of the vintage among the ancient Greeks; for the general character of dry, sweet, or luscious wines, which depends principally upon the soil, or moment of gathering the fruit, must have been similar in their times to that in our day. It is not thus uncertain with matters of a more important character. The glory of Greek literature and art is as brilliant now as ever, and matters of mere *gourmetise* may well be spared, seeing others of so much more importance remain to us. The flavour of the old Greek wines would, in all likelihood, have been to a modern palate worse than "caviar to the general."

Since the time of the conquest of Constantinople by the Turks, it is not at all likely that in the Greek islands the mode of manufacturing the wine (Οινος,) has much changed, however the quality might have become deteriorated. So recently as the period when the power of the Venetians was extended over these islands, the vintages were celebrated. In Napoli di Malvasia, about seventy miles from Napoli di Romania, in the Morea, was made the renowned Malvasia or Malmsey, which has since been imitated in almost every other wine country in the world. The vines from thence are said to have been transplanted into Candia. The yoke of Turkish despotism falling less heavy upon the islands than upon the mainland, habits were less altered there; and when little Malvasia wine was made in the Morea, it continued an article of very considerable importance in the exports of Candia, even after its fall in 1670.

The soil of the islands and the mainland of Greece

differs very much, but a large proportion is particularly favourable to the growth of the vine. Hills of calcareous earth, with slopes of benign aspect; gravelly soils, and others of volcanic origin, offer situations of rare occurrence for vineyards; but the rule of the Moslem made the profit of the slave too small, and his tenure of land too precarious for him to labour more than just enough to answer the ends of bare animal existence, after satisfying the rapacity of his masters.

The vine is cultivated in different parts of Greece in various methods. In Thessaly, where the Turks used to drink the must, though they would not touch the wine, in order to evade the breach of their prophet's command—in Thessaly the vines are trained for the most part after the low order, being what are styled dwarf vines. They are not propped. The bunches are for the most part fine and luxuriant, of a luscious and rich taste, and as large as Damascene plums. The wine is sweet, and would be good, but it is tainted with the disagreeable taste of pine resin, introduced with the notion of flavouring and preserving the wine; an ancient custom. A careful fermentation, with the naturally saccharine nature of the fruit, would be adequate to every object of durability.

On the mainland of Greece the vines were formerly numerous, and the produce considerable. In the late war whole vineyards throughout entire districts were rooted up by the Turks, and in the Morea the most wanton devastation was committed upon them by the troops of Ibrahim Pacha. In some places the high method of training over trellisses prevails, and in others the plant is not allowed to rise but a foot from the ground, and is kept closely pruned, a cup being excavated round the main stem to retain humidity at one season, and at another to prevent the grapes from touching the soil while the heat of the sun concentrates within it. At Corinth, where the vine flourishes remarkably well, it is not trained upon trellis work, as in some other places, but the vines are shaped like currant

bushes, and the clusters of small pearly grapes hang around them. Near the Field of Platæa, vines are planted to a considerable extent. Nothing but the want of a better and more scientific method of conducting the vintage, prevents the wines of modern Greece from ranking higher. The fermentation is carelessly executed, and the skin, with its pitch, makes the wines worse, some of which would be drank and pronounced good by foreigners but for this defect.

Candia produces a good deal of excellent wine at this day, though since it was conquered by the Turks its vintages have greatly deteriorated. The principal wine manufacturers were the monks. At Arcadi fine and noble cellars are shown at the monastery, where the produce of the vintage was formerly stored. Much *vin cuit* was prepared in this island. The grapes are some of the finest in the world. The lands of the monastery of Arcadi extend to the sea, and the wine they make is a rich malmsey. Good clairets are produced at Kissanos; and at Rethymo the Jews make a tolerable white wine, called *vin de Loi*. The white muscadine is not equal to the red, which is called Leattico; it is pleasanter than tent to the palate, and is sold very cheap. The wine drinkers of Candia were once so notorious, that a party of them would sit round a cask, and not rise until it was emptied.

The wines of Rhodes are said to be excellent; but they are nearly all of the sweet or luscious kind. One species of grape is as large as a damascene plum, and very similar in colour. The sun is sufficiently powerful in this island to keep the vines in bearing every month in the year, provided water is judiciously given to them, so that ripe and incipient grapes are seen on the same vine. This practice being thought to impair the plants, the watering them in December and January was customarily omitted.

In Cyprus, the hills on which the vine is cultivated are covered with stones or flints, and with a blackish earth mixed with ochrous veins. Some soils contain particles of talc. The vines are planted in equi-distant rows in the

rainy season, or about November. Young vines are in some spots planted in trenches three feet deep, in which thyme plants grow, or have been planted to shelter them in the wet season, and to preserve the earth about them. The plants are put into the ground with a ladder-shaped instrument of two staves, to receive the foot that forces it down. The plant is sunk about eighteen inches, a little water poured in on the root, and the opening filled up. In other places no trench is made, unless a hollow round the plant, when the fruit appears, may be so called, excavated to prevent the grapes from touching the ground and rotting, and which is further beneficial by retaining water or moisture, so needful in a climate intensely warm. No trees are allowed near the vines, and the surface is well weeded. The vines grow thick in the stem, but are not more than three feet high. They are pruned in February and March. Two shoots are left on each plant, and two buds on each shoot, or if three shoots are left, only one bud is reserved on each. No props are used, for it is believed that the grapes receiving the concentrated and reflected heat from the ground, as well as from the sun's direct rays, ripen faster. A few grapes only are borne on each plant, but these are plump and fine. They hang by long stems; are of a rich purple colour, and the pulp a reddish-green. The grapes of the Commandery have a thin delicate skin, and the pulp is compact. The vintage lasts six weeks, beginning about the twentieth of August, and the grapes for the more common wines are first gathered. When collected they are placed on covered floors, called *punsi*, and spread out with care to the depth of eighteen inches, where they remain till the seeds begin to drop from them. They are then raised with shovels and carried into rooms paved with marble, or covered with a cement equally hard and durable, a little sloping on one side. They are there bruised with a flat mallet, and squeezed three or four times under small presses, called *patitiri*, the thick expressed juice flowing into a vessel placed at the lower side of the floor, which is

emptied as it fills into small vases, and conveyed into baked earthen vessels, cone-shaped, half buried in the earth, their bases ending acutely like amphoræ. The wine ferments in these forty days. In some parts of the island these vessels are covered during fermentation.

The wine in the fermenting state cannot be taken without causing severe cholic pains. To prevent these it is sometimes fined by filtering it through bags filled with vine ashes, but when thus treated it never afterwards attains perfection.

When the forty days of fermentation have expired, the vessels are uniformly shut up close with covers of baked earth. The wine is now observed to be much lighter in colour than before. The vessels in which it ferments are either simply coated with pitch or painted internally, as soon as they come from the potter's furnace, with a boiling liquid composed of turpentine and pitch, mixed with vine ashes, goats' hair, and fine sand, which effectually closes the pores, and never falls off. The art of making these vessels is very ancient, even to the remotest ages. They contain from twelve to twenty barrels each. The deposition of the wine in them is styled *mana*. The wines are often transported to the coast in leathern bags, carelessly pitched, and detrimental to the flavour of the wine, which it takes many years to lose. The cellars, though in so hot a country as Cyprus, are all above ground. The casks are placed about six inches from the floor on joists. They have little light, and no attention is paid to aspect.

The country in Cyprus, situated between Limassol, Paphos, and Mount Olympus, not the ancient mountain of that name, contains a good many hamlets and villages, and was anciently occupied by the Commandery of the Templars and the Knights of Malta. The wine made of the best grapes is that still called the wine of the Commandery. The villages of Zopi, Omodos, Limnari, and Effragonia, afford good wines also. At Limassol the wines of the country are collected and transported to the cellars

at Larnic, which are the largest in the island, and there the wine trade is concentrated, or rather was some years ago, for the commerce of the island has of late much declined.

The wines of the Commandery are made in August and September, from grapes of a red colour. In hue it resembles the Italian wine of Chianti. As soon as it is made it is put into the earthen vessels before-mentioned. After being thus left for a year, its red colour changes to a yellowish tint. It fines itself by age, so that at eight or ten years old it is of the same hue, or nearly, as the sweet wines of southern Europe. The dregs it deposits are very thick, and they are supposed by attraction to aid the fining, so that the wine remains upon the lees until it has attained its last degree of limpidity. When the wine is brought from the country into the towns it is placed in casks, where there are dregs, for it must always remain on them a year at least after it is made, to acquire perfection. They do not regard whether the casks are full or not, for it makes no difference in the quality of the wine. They even deem it necessary in some places to empty the casks several inches down when they are put into the cellar. Thus various are the modes of bringing wine to perfection in different climates.

Cyprus wine is sold at the vineyard by the load. Each load is sixteen jars, and each jar holds five Florence bottles. The vendor must warrant the goodness of the wine until the fifteenth of August following the vintage, or for the space of a year, no matter whether it remains in his own possession or in that of the purchaser. If not found good it is returned; if the contrary, it is deemed a proof of its goodness in every way satisfactory. The quantity of real wine of the Commandery produced is about ten thousand jars, though forty thousand were once sent out of the island under that name. The Venetians were the largest purchasers of the inferior and newest kinds, which did not bring more than a piastre a jar in

Venice. Some of the same quality is sent to Leghorn. The better kinds sent to Italy, France, and Holland are sold for two and a half or three piastres a jar, equal to five bottles. This wine is generally exported in casks, of three hundred and fifty bottles each. The duties in the island used to be about ten piastres the cask. None of the wines exported are more than ten years old, and very little exceeding twenty will be found even in the private cellars.

The wines of an inferior quality produced in Cyprus are generally drank by the inhabitants. The best of them resemble the wines of Provence, and are called Omados. Like the wines of the Commandery, they grow yellow by age, and singular enough, seem then to approach in quality and flavour those famous wines. A little of them is exported to Syria, but none to Europe. These wines taste insupportably of pitch.

About five thousand jars of muscadine wine are made in Cyprus; the best at Agros. The sweetness of this wine is excessive; it drinks best at one or two years of age. It is clearer than the Malmsey of most other countries, and at first is white, but acquires a red colour and increase of body by age. The price is the same as that of the wines of the Commandery, a little varying with the goodness of the vintage.

These wines, it is most probable, have undergone little or no change since the days of Strabo and Pliny, who reckon them among the most valuable in the world. Selim II. conquered the island, that he might be master of them. At that time wines of eight years old were found, which it is said burned like oil. Cyprus wine, the Cypreots say, is, when old, a remedy for the tertian and quartan agues, so prevalent in the island, and excellent for cleansing wounds. After sixty or seventy years, some of this wine becomes as thick as syrup.

The age of Cyprus wine may be known by pouring it into a glass, and observing whether particles, like oil, adhere to the sides; this cannot be produced by art. It

is often adulterated with luscious wines and perfumes. Cold is injurious to the quality of the wine; it should be placed before a fire, if drank in the north, during autumn or winter.

One very remarkable circumstance attached to the wines of Cyprus is the value of the lees: they are always exported with the wine, if possible. Before bottling, a month or two of rest must be given to the cask, that they may subside. They settle with greater difficulty abroad than in their native island. The cask must be pierced above the dregs, and the wine will come off limpid, but this should only be done for bottling. The wine deposits no tartar on the cask, but the dregs or lees are sometimes a mixture in colour of black, red, and yellow, of the consistence of paste, but generally of the hue of Spanish snuff. The wine being poured upon them they rise, clarify it, and subside. They are always left with the vendor, unless there is an agreement to the contrary. Ten or twelve bottles in quantity are allowed to be kept back by the vendor from each cask for this purpose. Casks with the lees sell for four times the price of those without, and hence wines that are adulterated by colouring, or with any other object, do not produce lees, and lose their strength. A small quantity of lees should be thrown into every cask prior to exportation, and when eight or ten years old the wine should be bottled.

A sort of wine *liqueur* is made in Cyprus, and exported to Syria and the parts adjacent, but little, if any, comes to the West. It is imitated in Paris under the name of *vin de Chypre*, and sold as a *liqueur* in the coffee-houses.

Some of the wines of Cyprus are so tainted with the skin, that they cannot be drank by a stranger without water, except under the penalty of a severe head-ache. This is much to be regretted, as it arises entirely from neglect. At Omodos, some Frenchmen, a few years ago, attempted to make wine after the manner of Provence. When it had been a year in wood, and bottled for a short

time, it was equally as good, and could not have been known from the Provençal wines.

There is a custom in Cyprus, among families, of burying a jar of wine on the birth of a child, to be dug up on its marriage, which wine is never sold, whatever may be the fate of the child.

Most of the smaller Greek islands produce wine. Naxos was formerly noted for its drunkards and its temple of Bacchus. At Pirgo much wine was made about a century since. At Nicaria a white wine, very remarkable as a diuretic, is made from vines which grow among the rocks. Milo has frequently exported wine to the other islands. Samos, the wine of which was thought in ancient times to be bad, is now noted for excellent Muscat; large quantities of vines are grown there: both red and white are manufactured, and Samian wine is held in considerable repute. Tenedos produces both dry and sweet wines; its muscadine is famous, and it has exported five hundred thousand okes a year. Santorini is remarkable for the sulphureous taste borne by its wine when new, and for its vino santo. This vino santo is sold for three or four parats the oke at the vintage; it is made from white grapes, which are first exposed for seven or eight days on the roofs of the houses, then trodden or pressed, and fermented in close casks. It is a luscious wine, and a million of okes are said to have been exported in some years, principally to Russia. The wine of Meconi is so mingled with water to increase the quantity, that few will purchase it. Scio still produces wine called Homer's nectar, as it did two thousand years ago; the white and black grapes are mingled to make this wine, which is in much esteem in the Archipelago. Another kind, called Nectar, until matured by age, strangers cannot relish. The grape is said to be styptic. Mista is the most renowned vineyard. The wines which go under the name of "wines of the Dardanelles," are of very middling quality, and come for the most part from Lampsacus, in the Sea of Marmora.

Lampsacus, Thasos, Chios, and Lesbos, were famed for excellent wines, and upon all their coins, heads of Bacchus and Silenus appear, or else ivy leaves, amphoræ, grapes, or panthers, in allusion to the character they bore. Chio is high and hilly on the south side, with deep valleys; on the other side the land is low: it therefore possesses every kind of site agreeable to vine culture. The hills called Menaleto, St. Helena, Vicchio, Pino, Cardanella, and St. Angelo, were noted a century or two ago for their wines; but Arvisio, a wild, rough, rocky spot, excelled them all. There was one species of wine lately grown on this island that almost instantly took away the faculties upon a stranger's indulging in it. The wine of Chio or Scio was anciently in great repute. Cæsar gave away a hundred vessels of it on the occasion of his triumph.

The Ionian Islands, as they are styled, which are now in the possession of England, grow some good wines, whenever proper care is exerted in the management of the vintage. Zante wines are in much esteem, and the island grows about eight thousand casks annually. They are both dry and sweet. One of the latter is a *vin de liqueur*, unequalled in the Levant; it resembles Tokay, is called *Jenorodi*, and made of the Corinth grape. They have also a rich muscadine wine. All the wines grown on the island are strong. They make a wine which is taken as a cordial, although water is added to the grapes after they are crushed. Corfu produces strong wines, and a cordial *liqueur* from dried raisins, called Rosolio. St. Maura and Cerigo grow red wines of the quality of inferior Bordeaux. Cephalonia has a white muscadine peculiar to its own shores, besides the common red wines of the Seven Islands. The wine of Luxuria, in Cephalonia, was formerly much esteemed.

Finally, the territory of Greece possesses every variety of soil to produce the finest wines, but neglect in the vintage and culture of the vine, as well as in the process of fermentation, renders much of the product of the coun-

try almost nauseous to foreigners. The use of the resin, mingled with the wines to impart a short-lived durability, which a proper management of the vine and its products would ensure, is considered by the Greeks as a necessary and agreeable flavour.

The amount of wines grown on the mainland of Greece in 1816, according to Mr. Gordon in his excellent work upon the country, was nearly 4,640,000 okes, valued somewhere about 62,000*l.* sterling.

Albania, Romania, Macedonia, and Bulgaria, all except the last, produce very good common wines, both red and white.

The wines grown in Russia bear no comparison in quantity to the ardent spirit to which a coarse half-civilized people of the north may well be supposed to yield the preference. About twenty-eight millions of gallons of coarse brandy are every year distilled in that empire, besides a variety of other liquors, but, as may be inferred, little of this is the product of the vine. In the southern parts of the empire the vine has of late years been cultivated with success, and as the territory of the Tzars is extended in this direction by force or fraud, the extent of wine (*wino*, Russian) produce will be yet more enlarged. That manufactured at present is chiefly made at Astracan and in the Crimea. It has been already observed, that six hundred thousand vedros of a red wine called Kokour were grown in the Crimea in 1831. They sell, by the grower, at about six piastres the vedro [1]. The Crimea wines are thought the best in the empire, and from the description of travellers some of them are good red wines. There are about three hundred vineyards. Pallas says, that the valleys of Soudak and Koos manufacture the best. A large proportion of them is sent to Cherson on the Black sea. The manufacture is stated to have been confided to Greeks in many instances, which speaks ill for the

[1] A vedro is about fourteen gallons.

management of the Crimean vintage, to judge from the slovenly mode of conducting operations in Greece. The process of fermentation is carried on much in the manner of that already described as being the usage in Cyprus, or, if any thing, rather coarser. The vats are pits dug in the ground, and plastered on the inside with clay and lime. From the circumstance of a hundred eimers yielding four of brandy upon distillation, the strength of this wine may be easily inferred.

The inhabitants of the Crimea formerly prepared thick wines, or rather syrups, as well as confections, from the produce of their vines, and distilled brandy from the refuse of their grapes; but this is now given up, from finding the sale of wine more profitable. The vineyards of the Crimea are on the increase, and the climate is excellent; but it is easy to imagine the manufacture of a good wine is likely to remain a desideratum for some time to come. Bostandschi-Oglu is the growth most approved, grown at Koos. At Kaffa there is a *vin mousseux*.

The vineyards of Astracan are older, and the grapes which were first introduced there from Persia by an ecclesiastic, some time in the fourteenth century, have long been noted for their fineness and flavour. The first vineyards were cultivated by the government, but afterwards abandoned to private individuals, very few now out of one hundred and thirty-five belonging to the crown. It is said, that Ivan Vassilievitsh first ordered the vines to be planted there in 1613. In the time of Peter the Great the grapes were first sent to Petersburg, for his table, from Astracan, on account of their fineness. They bear a high price there, from the care necessary in the carriage.

The vineyards of Astracan produce both red and white wines, of the nature of which it is difficult to convey any idea, from the paucity of information respecting them. Twenty different sorts of vines are said to be cultivated. They are covered with earth or stubble in winter. The numerous waterings given the vines in summer to improve

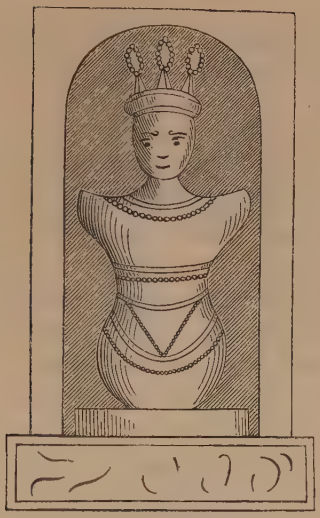
the size of the fruit, are said to render the grapes insipid; yet some of the wines are described as bearing a resemblance to Moselle; others to Lacryma Christi, and some sparkle like Champagne. They put the grapes into bags of coarse cloth, and tread them, after which they are pressed.

The Don Cossacks possess a few vineyards, which travellers say produce excellent grapes. The wines they prepare, though small in quantity, are reported to be good. A white wine of Rasdorof and Zymlensk sells at Moscow very high; one vineyard is managed by a Frenchman. The wine of Tangarog is much inferior. Sarepta is said to produce very good wine of the country. In some places of the Caucasus, they hang poppy heads, before they are mature, in the casks during fermentation, by which means the intoxicating effect of the wine is much increased. The vines are left to climb, according to nature, to the tops of the highest trees, where bunches of grapes are seen baffling the reach of the gatherers at the vintage.

Notwithstanding the immense quantity of spirits made and consumed in Russia, not less than a million of roubles has been paid, for years together, upon the import of wine into Petersburg alone. A late visitor to St. Petersburg, who saw so many and such extraordinary things there, which have been a sealed book to the travellers who preceded or followed him, imagined, from the quantities of Champagne he saw drank in that capital, that some other country existed of that name besides the Champagne of France. The doctor would have soon discovered, had he inquired, that almost all the places in the Russian empire which contained vineyards make a *vin mousseux*, though whether it has the bouquet and delicacy of that of Ay, is another question. The Astracan grape, one of the largest and finest to look at in the world, forced by frequent irrigation to the magnitude it attains, has its flavour proportionally deteriorated. Before it is ripe, reasoning with

Dr. M'Culloch, it would make a species of Champagne, and no doubt a vast deal of the sparkling wine of Astracan is consumed as such in the Russian city, to say nothing of the effervescing wines of the Crimea.

In Georgia good wine has been made even from wild vines; the process is negligent and slovenly. In the vineyards there is little attention paid to the culture of the vine, and the fermentation being neglected, the wine will not keep. The use of skins, daubed with asphaltum, taints the wine, so that few strangers can touch it, yet the country possesses all the requisite materials for making good casks. The inhabitants, nevertheless, are described by one traveller as drinking a *tongue* a day, a measure above five bottles of Bordeaux in quantity. The wine is so plentiful, it does not cost above a halfpenny the bottle, English money.



Bala Rama, the Hindoo Bacchus.

CHAPTER XII.

WINES OF PERSIA AND THE EAST.

PERSIAN LEGEND RELATING TO JEMSHEED—OF THE GRAPES AND WINES OF PERSIA—THE WINES OF MOUNT LIBANUS AND JUDEA—OF INDIAN AND CHINESE WINES.

Sir John Malcolm says, in his account of Persia, the natives have a tradition that wine was discovered by their King Jemsheed, through an accident. This monarch had an extraordinary fondness for grapes, and placed a quantity in a vessel of considerable size, which he lodged in a cellar for a future supply. Some time afterwards, the vessel being opened, the grapes had fermented, and being found acid, were believed by the king to be poisonous, and marked accordingly. A lady of his harem, tired of life, owing to the sufferings she endured from a nervous head-ache, drank some of the wine, or in plain matter of fact, got drunk. She slept, awoke well, and afterwards took so many potations that she finished all the poison.

The monarch discovered what she had done, and thence took the hint for his own advantage.

Whether this story be true or not, the general consent of universal tradition has bestowed the origin of the vine upon Persia. The fruit in that country reaches a remarkable size, and the provinces bordering upon the southern end of the Caspian Sea have been always noted for excellent wine. It is said the Armenians claim the precedence, because Noah planted his first vineyard near Erivan, about a league from the city walls, upon the very same spot where he and his family resided before the Deluge; but the certainty of the truth being thus upon their side must be settled by doctors learned in casuistry and divinity. The natural evidence, if it may be so called, is on the side of the Persians, since their country produces the finest grapes, some of which are a fair mouthful. Yet the white wine of Ispahan is made from a small white grape called *Kismish*, which has no pips, perhaps first brought from the island of that name, noted for fine fruits, near Gombron. The grape of the province of Cashbin is celebrated; it is called *Shahoni*, the "royal grape," golden coloured, and transparent. The grapes are kept over the winter, and remain on the vine a good deal of the time in linen bags. A Persian winter, it must be observed, is very different from an English one, the air being dry and fine for the whole season.

It is in Farsistan or Ferdistan, upon the lowest slope of the mountains not far from Shiraz, that the largest grapes in Persia are grown, though the imperial grape of Tauris is most extolled for eating and the table, being considered more delicately luscious. The whole country near Shiraz is covered with vineyards. The best red wine is made from a grape named *Damas;* it is said to be of good strength and body, and to keep well for fourscore years, preserving all its virtues in the highest perfection. This wine is put into flasks of glass called Carabas, of about thirty quarts, covered with plaited straw, and packed in

chests of ten bottles each. In this way it is sent to Teheran, Bassora, the East Indies, and wherever it is exported.

There are twelve kinds of grape grown near Shiraz; there are species violet, red, and even black in colour, as the *Samarcand* grape; a single bunch of some kinds will weigh a dozen pounds. They sell their wine by weight, and keep it either in flasks or jars of well-glazed earth. Their cellars are strong, and built with great attention to coolness, water being often introduced for this purpose, and seats are frequently provided in them for visitors to enjoy the wine in greater luxury, although forbidden by the Mahomedan law.

Of the quantity of wine grown at Shiraz it is not easy to form an estimate. Tavernier states, that when he travelled, between four and five thousand tons were made annually. The grapes are placed in a vat, and well trodden, the must passing through by means of small holes into another vessel, and thence into jars of glazed pottery, in which it ferments upon being placed in the cellar, where the must is agitated briskly. It is afterwards strained and put into bottles for sale. One of the wines of Shiraz is a *vin de liqueur*, made remarkably sweet and luscious, and full of strength and perfume. The celebrated Shiraz wine sent to England as a present from the King of Persia was white, but some in the country is deep, even to a dark amber colour. The red wine of Shiraz, known in Europe, is like Bordeaux in appearance, and of a taste not agreeable to strangers. The white resembles Madeira, to which it is by no means equal.

Mr. Morier says, that the vine dressers of Persia train their vines up one side of a wall, and then make them hang down on the opposite side by suspending weights to the tendrils or branches. This ingenious traveller observes that they only water their vines near Shiraz once a year, about the tenth of April, the soil holding the moisture

sufficiently well to answer every purpose until that time twelvemonth.

A great deal of wine is drank secretly in Persia by the Mahomedans, independently of what is consumed by the numerous inhabitants of that country who are not of the Moslem creed. A vast proportion of the empire disappoints the traveller, who has heard of the beauty of the country, and the luxuries with which it abounds. The fertile spots, indeed, are equal to every thing which has been reported of them; yet in proportion to the extent of the empire they are not numerous. Shiraz about a century and a half ago was more populous than at present, but even then the ruins were extensive, among which vineyards were then planted. At that time a pottle of Shiraz wine was sold for half a crown English. Mandelsloe, in 1638, says Shiraz was then noted for the excellence of its wine and the beauty of its women, and repeats a saying of the Persians, that "if Mahommed had been sensible of the pleasures of Shiraz, he would have begged of God to make him immortal there."

Marco Polo, the traveller, met with boiled wines on the confines of Persia as long ago as the middle of the thirteenth century. He says, that the Mahommedans of Tauris, to whom wine was forbidden by their religion, used to boil it, by which means they changed the taste of the wine, and consequently the name, whence they might lawfully drink it, through the gloss thus flung over the stumbling-block which their faith cast in the way of their enjoyment. The same writer adds, that the people were great drunkards. Tauris boasts of sixty different kinds of grapes.

Teheran, Yezd, Shamaki, Gilan, and Ispahan, are the principal wine districts in Persia known to strangers. In Mingrelia, the ancient Colchis, the soil is bad, but the wines are characterized as excellent. Georgia sends its wine to Azarbazan and Ispahan. At Teflis wine is sold

openly. Wine tolerably good is said to be made in Chorasan. The Turks, both in Persia and the neighbouring countries, when they take the forbidden draught, laugh at Christians for mingling water with it; and yet if they but spill a single drop upon their own garments, however valuable they may be, they immediately throw them away as polluted. The Turks always intoxicate themselves, hence the wine manufacturers in Mahommedan countries add stimulating and intoxicating ingredients to the wines made for secret sale to the children of the Koran. Of late years the manufacture of wine, even at Shiraz, has been neglected, and it is much to be feared the produce of the still has taken its place with the Mahommedans in their covert oblations to Bacchus.

Tavernier says, that Shah Abbas II. was much addicted to wine, but did not on that account neglect state affairs. Sir John Chardin states much the same, and informs us that his successor, Solyman, loved wine and women to great excess, and being always half drunk, was exceedingly cruel in consequence. His son, Hussein Abbas, was so struck with the ill effects of wine, probably from his father's example, that he forbade the use of it in his dominions, until his mother feigned illness, and her physicians declared nothing but wine would save her life. Hussein instantly conceded the request out of filial piety, and obliged her so far as to taste it himself, on which he became, as his two predecessors had been, a slave to a love for the juice of the grape; and the result was more fatal to Hussein than it had proved to them.

The red wine of Shiraz has been extolled by the verses of Hafiz in exaggerated strains, but it is to be feared, from the best estimate which can be formed, that it was of a quality by no means first-rate. The Falernian of Horace and the Shiraz of Hafiz are, it is too truly to be apprehended, both exaggerations, if they could be placed in comparison with the delicate flavour of modern French growths of prime character; besides, who constituted them

connoisseurs in wine for any but their own palates? Both wines would no doubt intoxicate, and both were delicious to the taste of the poets and their friends; but in times when plain truth is most valuable, the probability, however much it may injure early and agreeable associations, is always to be strictly preferred. Writers who follow their predilections are apt, with little regard for any other consideration, to imagine modern things deteriorated, and thus assert that the wine of the ancients was best, though they are incapable of deciding the question either one way or another, except by the varying and worthless test of conjecture.

The Armenians at Chiulful were formerly great drunkards, though not profane or quarrelsome in their cups, like their fellow-Christians who drink port wine, but instead, were doubly devotional, and when very much intoxicated, poured forth incessant prayers to the Virgin and her Son. Had this result been general in Europe, jesuitical influence would have turned it to some advantage in the days of priestly power; perhaps proclaimed intoxication a virtue.

The other wines of Asia are few and little known. In Arabia the vine is cultivated by Jews and Christians; and the followers of the Koran, as elsewhere, drink the juice in secret, no doubt finding it sweeter for being denounced by their religion. In Arabic they call it "Khumr." In Anatolia a good deal of wine is made, and particularly at Trebisonde. Syria produces red and white wines of the quality of Bordeaux. At Damascus the "wine of Tyre" of the Scriptures, called by Ezekiel "wine of Helbon," and by the Greeks "wine of Chalybon," is yet made; it is a sweet wine. On Mount Libanus, at Kesroan, good wines are made, but they are for the most part *vins cuits*. The wine is preserved in jars. A wine called *vino de oro* is in much esteem there, and it is said to be a dry wine. In cultivating their wines on Mount Libanus the spade is not used, the plough superseding it entirely, as the vine rows are sufficiently distant to allow its free passage

between them. The vines are not propped, but creep along the surface of the ground. Some of the wine is exceedingly delicate and pleasant to the taste. The grapes are as large as plums. These they say are of the class the Hebrews saw when approaching the land of promise, to which they belonged of old—if so, they might well covet them. The soil is strong; in certain places iron stone prevails, in others volcanic rocks are found. The Maronites and natives drink freely of their wine and are said to be remarkably convivial. At Jerusalem white wines are made, but of poor quality.

The territory of India was the fabled birth-place of Bacchus; and Sir W. Jones compares to him Bala Rama, who married an old maid named Revati, of four millions of years' virginity, so tall that the hands clapped seven times could only just be heard. Suradévi is the Hindoo goddess of wine. India at present produces little or no wine, except in the northern parts between the Sutledge and the Indus, or bordering upon the former river; indeed to the southward the climate is too hot, and the soil too rich for vine culture. The Indians, according to Diodorus, say that Bacchus first taught them the art of pressing grapes and making wine, and that he resided in his capital of Nysa, in the modern Punjaub, that he ruled India with justice, and was after his death adored as a god. All this, however, fabulous or not, only relates to the territory west of the Sutledge, or as it was anciently called, the Hyphasis river, which is the extreme north-eastern frontier of the British dominions at present. Eastward of this the arms of Alexander never penetrated, nor does it appear the ancients knew anything of the country. At Lahore, beyond the Sutledge, wine is made of good quality, and all the way from thence to Condahar, and northward to and in Cashmere, vines are planted and wine is manufactured. That of Cashmere resembles Madeira. Wine is made in Nepaul, where the best is prepared in the common way. The must is called *sihee*. Hot water is poured on the

murk and residue, and a less worthy sort is thus manufactured. At Condahar wine is forbidden to be drunk, according to custom in Mahommedan countries; but that drunkenness does happen, is plain from the punishment attached to those who are discovered intoxicated. They are seated on an ass with their faces towards the tail, and so led through the streets, preceded by the beating of a gong, and surrounded by a crowd of vagabonds.

Wine was once made in Golconda upon the hills. During the reign of the great Akbar, whose tomb near Agra has lately been repaired, though wine was forbidden, yet it was evidently used in this the noblest city of his empire. It is related that Akbar, standing in need of good gunners, got some from on board English vessels trading to his dominions. One of these, who from the dry character of the man was evidently a tar, being ordered to fire at a carpet suspended as a mark that the emperor might see his dexterity, purposely shot wide of it. He was reproved, and told he was an impostor; upon which the fellow answered, with great pretended humility, that his sight was bad from having been debarred the use of wine, but if Akbar ordered him a cup, he could hit a smaller mark. A cup, a full quart was brought him, which he drank off, and then firing, hit the mark to the applause of all present. Akbar ordered it to be recorded, "that wine was as necessary to Europeans as water to fish, and to deprive them of it, was to rob them of the greatest comfort of their lives." He then gave permission to foreigners to cultivate vineyards in his dominions. There can be no doubt but the vine would flourish well on the table lands and mountains of India, as on the Nilgarry hills, where the temperature and soil are all that can be desired for the purpose. The wine of Delhi in the time of Aurung Zebe, was imported from Persia, by land or by sea, to Surat. The wine of the Canaries was brought to the same port, and both sent overland to the imperial city, where a bottle cost in those days three crowns, though no more than three pints in measure.

The Chinese are said to make a small quantity of wine, though they prefer the produce of the still from animal flesh, as in their spirit of lambs' flesh, said to be very potent and disagreeable. They have a rice wine called Sam Zou. The Chinese say, that under the emperor Yu, or Ta-yu, twenty-two hundred years before Christ, wine was invented by an agriculturist named I-tye. The government of that time, however, laid what are now called heavy prohibitory duties upon it, not with the mercenary and ignoble motive of modern rulers, to fill their pockets, but lest the people should grow effeminate from the use of so delicious a beverage. This philanthropic kind of legislation was vain. Those who had tasted could not refrain from tasting again, and indulging to excess; so that a sort of northern Tzar, named Kya, about fifteen hundred years before Christ, filled a lake with it in one of his freaks of autocratism, and made three thousand of his subjects jump into it. Grape wine was always esteemed there the "wine of honour." Yet mandates have been issued at various periods for rooting up the vines, until the grape was almost forgotten. Grape wine is spoken of in annals of China long before the birth of Christ. Rice and palm wine are made in large quantities. The Chinese, it is certain, will buy European wines, particularly sherry, for it is often imported in British vessels, and sells well. The grape is also grown at Siam, but only for raisins to distil into brandy.

The islands in the east many of them produce the grape, but it is too luscious for making wine. Near Batavia, in Java, the vines bear ripe fruit three times in the year.

The vine has been introduced into New South Wales, in all its varieties. Wine, said to be of a very tolerable quality, has been made there in small quantities. The climate is admirably adapted for the vine, and it may be expected that in a few years a product of value may be supplied for home consumption, if not for exportation. Of the quality of the wine which has been made in Sidney, there is yet

no means of judging. Mr. Busby, who wrote an account of a tour which he made in Europe, for collecting choice varieties of the vine to introduce into that colony, proves that durability, without brandying, is one of the virtues of the New South Wales produce, for he brought it to Europe and took it back to Australia, perfectly sound on his arrival: another proof of the idle notion that all wines must be brandied to bear a voyage, no matter how short. The truth is, that brandy renders bad wine potable, and reduces good wine to the mediocre standard of bad wine well brandied, and made according to the English taste generated at first by this very practice. The raising bad, and depressing good growths, was adopted to enable the Portuguese monopolists to have one saleable class, and never to fail in stock from any of the accidents of a season.



CHAPTER XIII.

WINES OF AFRICA AND AMERICA.

FEW AFRICAN WINES NORTH OF THE CAPE—WINES OF THE CAPE OF GOOD HOPE—IMPORTATIONS FROM SOUTH AFRICA INTO GREAT BRITAIN—CULTIVATION OF THE VINE IN AMERICA.

The continent of Africa no longer boasts through Egypt of its famed Mareotic wine; the vines once so famed are now cultivated principally for their shade, and the fruit neglected, or dried for making raisins. It does not appear that wine is made on either side of the vast peninsula of Africa, though Ethiopia yields very good grapes. On the northern coasts, at Morocco, wine is manufactured by Jews, and in Tetuan it is made nearly equal to the Spanish wine of Xeres. In different parts of the Algerine territories vines have been grown, and good red wine made by persons not Mahommedan. The visits of the locusts, however, have been found very destructive to the vines. The Mahommedan religion is an obstacle to this species of

cultivation, which must be in the hands of individuals of a different faith, though in secret the faithful quaff the produce with great relish. The heat and aridity in some countries, and the excessive richness of the soil in others, are equally prejudicial to the culture of the vine. Deserts of burning sand, and a population completely savage, occupy the middle portion of this quarter of the globe, and it is only at European settlements in the southern hemisphere that civilization has introduced one of its greatest luxuries on any tolerable scale of extent or success.

The vineyards of the Cape of Good Hope are some of them in the vicinity of Cape Town itself, where the beauty of the climate and equality of the temperature are particularly favourable to vine cultivation. The proper choice of a site for a vineyard was seldom taken into consideration by the Dutch, who first planted vines, under the governorship of Von Riebeck in 1650. At least so the Dutch say, but on the revocation of the Edict of Nantes, the Dutch settled a colony of emigrant French, at Franschehock, a secluded valley, and the residents at the Cape give them the merit of the introduction. Their descendants are still the principal vine growers. There are many places were the soil is exceedingly favourable, but these are neglected for situations which have been chosen from local convenience, the caprice, or mistaken policy of the planters. The fertility of some of the land near the first settlements was very great, and on that account the less applicable to vine culture, yet vineyards were planted in such places very early after the Dutch began to bring in the land. It is not far from Cape Town, or about half way between the Cape and Saldanha Bay, so well known to seamen, that the Constantia wine, celebrated among the first class of luscious wines, is grown. The vineyard is very small, and is divided into two parts, belonging to different proprietors, called the Higher and Lower Constantia, separated only by a hedge, and having

an eastern exposure. It was named from the farm on which it stands, and the farm from the wife of the Dutch governor, Vander Stel, who formed it. The wine of both vineyards is nearly alike in quality, though the Cape connoiseurs pretend that there is a considerable difference. Formerly, when the Cape belonged to the Dutch, their East India Company always took off a third at a fixed price. Threescore years ago the wine sold for between two and three shillings per bottle on the spot. It lies about eight miles to the west of the town, and the produce both of the red and white does not exceed eighty or ninety pipes annually, though some have calculated it at twelve thousand gallons. The soil of the Constantia vineyard is a sandy gravel lying upon a gentle slope. The vines are of the Spanish Muscatel species, and cultivated without props; when pruned, only a small number of buds is left for bearing. The wine is pressed after the grape is freed of the stones and every extraneous substance. The casks are deposited in a cellar, where the air has a free circulation, upon a level with the ground. The price of Constantia varies from a hundred to a hundred and forty dollars the half aum of nineteen gallons. The other wines run from twelve dollars as high as seventy-six.

Stellenbosh, so called from the Dutch governor Stel, and the bushes which covered it, is a second wine district, north of False Bay, by the Stellenbosh river. Stel seized upon large portions of territory for himself with more than Dutch cupidity, and drew a great profit from the vineyards and corn fields in that part of the colony. He constructed a reservoir in the mountains to water his farms and vineyards, which he conveyed in a channel by his wine cellars to a mill where he ground his corn. The valleys are described as being very fertile in corn and vineyards. Drakenstein, another settlement to the north-east of Stellenbosh, was settled by French refugees in 1675. In Simon's Valley, one Von Blesius planted vineyards, and, as well as Stel, seems to have turned the country into a

source of private profit, until an ordinance from Holland in 1707 forbade the civil officers of the colonies trafficking for their own advantage in wine, corn, or cattle. It appears that wherever land was proper for the growth of corn, vineyards were introduced, and to this conduct the bad quality of most of the Cape wines may be ascribed. The beauty of the vineyards at the Cape seems to argue against their existing site and mode of culture. Two vineyards in 1722, near Cape Town, are described as the most beautiful in the world, one fourteen hundred paces long by two hundred and thirty-five, with a rivulet through the midst. The Dutch placed high duties upon the wine sold at the Cape to strangers touching there during the infancy of the colony. Dampier speaks of the strength and sweetness of the wine in his time, but he probably alluded to the Constantia. In no wine country is there room for greater improvement, nor is there any in which care and science, properly directed, would earlier exhibit their effects. No method recommended by European science or experience prevails here. The improver would have to encounter very considerable obstacles. That it would be highly beneficial to Great Britain, as well as the colony, there is no doubt. Things are undoubtedly better now than they were twenty years ago, but amendment is very slow. The obstinacy of the Dutch character is proverbial. Old habits can with difficulty be overcome in a long series of years. The boors are a very ignorant race of people, and not at all of speculative habits, but content to do what their fathers did before them, and no more.

Except a soil consisting of volcanic remains, there are traces of every other species of land congenial to vine culture; and there can be no doubt, that were vineyards planted on the sites better adapted to their growth, and the grapes selected with due care, a vast deal of good wine might be sent from the Cape into Great Britain. The quantity of produce is now the only object kept in view by the farmer. The vines are not always propped for the

common wines. It is observed already, that they never are propped for the Constantia wine, but left too frequently to grow like currant bushes in England, and even to rest upon the ground: hence, perhaps, one cause of the earthy taste of the wine. The customary mode of doing every thing as it has been done before, together with an inveterate adherence to custom, render it very difficult to effect the least amelioration, where a Dutch farmer is concerned. He presses his grapes under any circumstances that will ensure quantity of product. Carelessness in training and dressing the vines also equally contributes to perpetuate the bad nature, and bad character of the wine, in a country where nature is free from any share of the blame.

The wine grown at the Cape is both red and white, and the larger part is dry. They have, besides the Constantia, a red wine called Rota, and other wines grown at Stellenbosh, Dragenstein, and Perle. The real Cape Madeira is a boiled and mixed wine, and used to be sent to Holland, India, and America. The farmers sell their new wine to merchants at Cape Town, for thirty-six dollars the leaguer of fifty gallons, which the latter retail at an advanced price, adding execrable native brandy, or ship it off to the quickest market, rarely having capital to retain it in their own hands until it is properly matured by age. The greater part of the wine produced goes by the general name of Stein wine, some of which, when carefully prepared, and after due keeping, is really excellent at about seven years old. The absurdity of government interference exists at the Cape; tasters, inspectors, and what not, get a living upon the wine owners, mere tools of the government, for which the people are taxed. The wine is not permitted by these agents to leave the grower's hands under six months or longer at their caprice. A duty, equal in some cases to one-half the price of the wine, is laid upon that which enters Cape Town for consumption. The entire product of the vineyards of the Cape is calculated at fourteen thousand leaguers, of which the colony

consumes six thousand; two are sent to St. Helena, and the rest exported, a large part to this country. From the Parliamentary papers in 1817 the total quantity was then estimated at about twenty-one thousand pipes and upwards.

The importation was as follows in tuns from 1816 to 1820:—

1816	1,631	2	21
1817	4,218	0	29
1818	3,648	0	15
1819	1,648	3	19
1820	1,925	0	60
	13,071	3	18
Of which were exported again .	1,923	1	17
Total consumed in Great Britain in five years . . .	11,148	2	1

A large proportion of Cape wine is used in England to deteriorate the growths of other countries, by making what are called cheap wines. The wretched description of most of the Cape wines, thus imported, shows but too clearly how little good has been done by the influence of British capital and adventure towards increasing the good quality of the wine, or else that the capital has been directed as ignorantly as that of the Dutch, to the enlargement of the quantity of the wine, with an utter disregard to quality. Yet tolerable wine is to be drunk at the Cape itself, from its own vineyards! Red Cape drunk of a proper age in the country is a sound, good wine. Who would believe this, from the specimens tasted in England? yet it is perfectly true.

The merchants at the Cape are more careful of their cellars and appurtenances than of the wine they export from them. In these they deposit the produce of their purchases from the farmer in large tuns, made of a hard

dark wood, holding six or seven hundred gallons each. The bungs are kept locked down by brass plates well scoured, and only opened in presence of the owner.

The grapes were brought to the Cape from the banks of the Rhine. The muscadine grape, as before stated, is found there, as well as the Frontignan and other European species. The fruit is rich, full, and fine, and has none of the earthy taste found in the wine. It is therefore very probable that this taste is further aided by the stalks and stems, for the grapes are neither picked nor sorted, ripe from unripe, except for the Constantia, and what earth may cling to them all go into the vat together, the whole management being generally confined to slaves. The casks are ill prepared for the wine. The vintage labour takes place in February and March. The process of fermentation is ill conducted; even the operations preceding the vintage are rude, and managed as coarsely as cider-making in Devonshire. The grossest manure is applied to the vines. It is, therefore, not wonderful that Cape wines have been so much depreciated in public opinion. This is the more to be lamented, because the mother country possesses no colony where the advantage of a more genial soil exists, or where better wines might be grown. The reduced duties, and extent of the home population, would secure a consumption for a superior wine, which would render the Cape in return pecuniary advantages that could not fail to be felt by the colonists. It is wonderful that English speculation, securing a few French cultivators, has not made some attempt to raise the character of these wines, of which even the worst find a market. The return would not be slow, the capital secure, and a little patience would recover the market for any distinct well-characterized wine which might be grown. There is, however, another obstacle to be overcome in the ill-managed fiscal regulations of some of our colonies, and the arbitrary enactments of military governors ignorant of

every thing but regimental duty, whose will is too often the sole law by which every thing in them is regulated.

In America wine is made in many places, both on the north and south continent. The wild vines on the Ohio attain an immense size, and wine has been frequently made from the grapes they produce. Some species of wild vine are of prodigious size, their trunks being from seven to ten inches in diameter, and their branches hanging down sixty or seventy feet from the tops of the tallest trees. Certain Swiss settlers, in the states of Ohio and Indiana, have cultivated the vine with considerable advantage. The crop in 1811 was as much as twenty-seven hundred gallons, though the vineyard was only planted in 1805. The wine is said to resemble Bordeaux in quality. Vines from Madeira and the Cape of Good Hope are found to succeed. Wine was known to be made twenty years ago from the native grape of America, to the value of six thousand dollars in addition. Of these, and the wines grown near Philadelphia, the author has no means of ascertaining the quality. In several parts of Mexico good wines of the second class have been produced, as at Passo del Norte. Those of Paras, in New Biscay, equal them. Wines are also made at St. Louis de la Paz and Zalaya of tolerable quality. California has numerous vineyards, which give an agreeable red wine. A vineyard established on the Kentucky River in 1798 did not meet with success, probably from the rich state of a primeval soil owing to the excess of vegetable decomposition. The bānks of American rivers must, for the most part, be uncongenial sites for the vine, as they flow generally through a fertile and level country.

Wine was long ago made in Louisiana and in the French colonies of America. In Florida a considerable quantity was produced from a native grape, resembling that of Orleans, as far back as 1564, according to the testimony of Sir John Hawkins. Twenty hogsheads were made in

one year at a particular spot, and it was well tasted, but the colony got into a dispute with the Indians, and was ruined in consequence together with the manufacture. Laudonniére says, writing his voyage to Florida in 1562, that the trees were environed about with vines bearing grapes, so that the number would suffice to make the place habitable.

In Mexico, where the small wild grape was indigenous, the Spaniards had introduced that of Europe as early as 1572.

"Master Ralph Lane," the head of the first colony established in Virginia, wrote to England in 1585, that he had found in that country "grapes of suche greatnesse, yet wilde, as France, Spaine, nor Italie have no greater." This perhaps savoured a little of exaggeration. Thomas Heriot, who compiled an account of the productions of Virginia for Sir Walter Raleigh, says, there are two kinds of grapes yielded naturally, one small and sour, of the size of those in England; the other far greater, and of a luscious sweetness.

The island of Cuba has an abundance of wild grapes, which have an acrid taste, and afford a light cool sharp wine. The trunks of the vines are often as thick as a man's body, and with their branches interwoven extend in thick woods over leagues of surface.

South America abounds in vineyards. Wine has been made in Paraguay long ago: it was forbidden to be manufactured in the Brazils during the sovereignty of Portugal there. Vines are grown at numerous places between Buenos Ayres and Mendoza; they are remarkably productive, and bring forth fine fruit wherever the owners have taken the necessary trouble with the cultivation. The post-houses on the road, after that of Achiras, surprise the traveller with the richness and beauty of the fruitage surrounding them. The clusters of grapes are remarkably fine and rich, and are intermingled with the pear, apple,

and peach, in the most luxuriant manner, all in great perfection. A very good second class wine is made at Mendoza, at the foot of the Andes, on their eastern side, which is an article of considerable traffic with Buenos Ayres, a thousand miles distant across the Pampas. They are transported even during the summer heats, and so far from spoiling, are found to improve by the carriage. The quantity thus sent is considerable. The wine is not carried in the *odre*, or hogskin of the mother country, which so infects the otherwise sound wines there, but it is conveyed in small barrels slung on each side of a mule. Sweet wine, resembling Malaga, is made at Mendoza, to which end they suspend the grapes for some time in bunches to mature, after they are taken from the vine. On approaching Mendoza, fields of clover and vineyards greet the eye on both sides, and the gardens of the city are filled with some of the best muscatel grapes in the world, both for size and flavour. The vineyards produce black and white grapes alike; the vines are not suffered to grow above four feet high, and the vineyards are irrigated. Both red and white wines are made, the latter bearing in the United States the price of Madeira. The wines are sent in exchange for barrel staves, a plan which Old Spain had never the sagacity to imitate. Brandy is also distilled from these wines.

Peru affords delicious grapes of various kinds, principally for eating, near Lima. No wine is made near that city, from the great demand for the fruit. The vines grow in a stony and sandy soil, and are of good flavour, but that called the Italian is remarkably large and delicate. The vines are regularly pruned and irrigated, and require no other attention. The culture bestowed on the vines, from which the wine imported into Lima is made, at Ica, Lucumba, Pisco, Nasca, and other places, does not differ; the vines are generally trained upon espaliers. The soils are stony, sandy, or consist entirely of smooth flints and

pebbles; not more than eighteen inches of earth any where covers them even in the part devoted to arable purposes. The land may, therefore, be imagined very congenial to vine culture. The trenches which still irrigate these lands are the work of the unfortunate Incas, which, amid all their blind devastation, the Spaniards had the foresight to preserve. The olive flourishes here in whole forests, and gives finer oil than in any other country.

The wines made both in Peru and Chili are white, red, and dark red. Those of Chili are thought the best, the muscatel being remarkably good. The wine of Nasca is white, and least in request, being of inferior goodness; brandy of good quality was once distilled there, and sold at Lima. The wine of Pisco sells best, and is highly esteemed. Callao is the great entrepôt whence the wines are re-exported to Guayaquil, Panama, and Guamanga. In Chili, though the vines produce better fruit for wine than in Peru, purchasers of the wines to a remunerating extent are wanting, and a good deal of the vine ground is neglected. The red grape is most cultivated, and is remarkable for richness and flavour. The muscatel far exceeds that of Spain, as well in the fruit as the wine it produces. The vines are grown on espaliers. The Chili wines were formerly sent to Lima in considerable quantities. At Cumana they were sold as low as five-pence English a bottle. The white wines were celebrated long ago in South America. They were first made of two species of grapes which bore the names of Uba, Torrentes, and Albilla. The red wines were made of a grape called Mollar, and had considerable perfume. Nothing can equal the beauty of some of the clusters of the Chilian grape. A bunch has been gathered so large as to fill a basket of itself. The trunks of some of the pollard vines are as large round as a man's body. The Spanish traders formerly presented the Caciques of Arauco with wine when they wanted to traffic, and by that

means always obtained leave. In 1824 the Spaniards forbade traders to carry more wine into the Indian territories than was sufficient to treat the masters of families to a passing cup, because the inebriation of the Indians was followed by lamentable excesses.



Wine Vessels—The Sack Cup is at Cothele, Cornwall.

CHAPTER XIV.

ON KEEPING WINES.

OBSERVATIONS ON THE CONTENTS OF PRECEDING CHAPTERS—ON THE PRESERVATION, CELLARING, AND MELLOWING OF WINES.

THE account of wines in the preceding chapters, and the mode of making them, so varied in detail in different countries, and yet in the general operations of expression and fermentation the same in all, furnish much matter for reflection. The division of wines into three grand heads, of dry, sweet, and luscious, would, perhaps, be the best method of classing them, while treating of their qualities; but the terms of dry and sweet having been adopted customarily, it may be as well to follow the general rule, for the sake of simplicity, as the subdivisions from these two heads may be made to include the thicker and more luscious under the generic term of "sweet," as well as the more meagre in sugar, under that of "dry" wines.

It is singular that good wines should be made under such multifarious modes of treatment as are shown in the

foregoing part of this work. The process of fermentation is carried on in many different modes, not regulated by locality or climate, and wine of excellent quality is produced under each. It seems difficult to decide which mode is to be preferred. The first requisite to make good wine seems to be a peculiar quality in the soil in which the fruit is grown, more than in the species of vine itself. Every treatment after the vintage is secondary to this. The quality in the soil which operates upon the plant, so genial in some spots, yet scanty and confined in limit, is in its precise nature unknown. The general character of the soils, friendly to the vine, is already familiar to the reader; but the nature of the influence possessed by one small spot in the same vineyard over another, as exhibited in the productions of several choice varieties of vine, will, perhaps, for ever baffle the keenest spirit of inquiry.

The second requisite to good wine is the species of plant, aided by a judicious mode of training and cultivation. On the whole it appears, that, to refrain from attending to the soil at all, is better than to overwork it. Three-fourths of all vines are grown on hills, and wines of the first character are made from those that flourish among stones and pieces of rock, with little attention, more than occasionally raking the ground between them, where it is possible to do so. Hermitage was first grown among granitic rocks and stones, broken smaller by art, and little or no dressing was used; on the other hand, no wine of tolerable quality is grown on rich highly dressed land, this may be taken as of equal truth in the north and south. It is remarkable also, that the quantity of must, afforded in different situations in all respects similar, differs much; and that, on approaching the south, the quantity rather diminishes, as if with the increase of the saccharine principle of the grape. Thus, in the department of the Meurthe in France, the quantity of wine per hectare is never under $50{\cdot}64\frac{1}{6}$ hectolitres. Examples of two hundred are on record, an incredible quantity. Reckoning the hectare at two acres and a half,

and the hectolitre at twenty-six gallons, this amounts to upwards of twenty-two hundred gallons for the English acre. On the other hand, the produce in the Côte d'Or only averages 22·81 each hectare, and only ten or twelve for the richer wines, while the poor wines of the Seine and Oise yield 52·13⅝. The table of the relative products of the French vineyards, at the end of this volume, is curious, and will show these variations in quantity more fully. The species of plant, which is a favourite in one district, is discarded in another. In making the drier wines, the species seem more regulated by caprice than judgment; while, for the luscious, the rich grapes of the east are cultivated in preference, from their abounding so much in sugar.

The fermentation is carried on in troughs, vats, or casks, in all countries, covered, or open, or in France with the apparatus of Gervais, to which allusion has already been made. This last mode is recommended, because the inventor supposes it retains the strength and aroma of the wine, but a far better method is adopted in *tonneaux à portes* (p. 134). See Appendix, No. II. It is argued by some that the process should be as quick as possible, and by others that it should be slow, while each pursues his own method. As fermentation has been already touched upon generally, the mention of it here is rather with the intention of recalling the various modes of accomplishing it in different places than the simple operation. Effervescing wines in Champagne are casked soon after the fermentation commences, and the must is not allowed to free itself of the carbonic acid gas, nor to remain in the vat but a few hours, nor is it racked until the Christmas after the vintage. In the Ardeche, on the contrary, the wine of Argentière, designed to effervesce, remains in the vat twenty-four hours, the must is racked into large bottles, and decanted every two days, until there is no further appearance of fermentation, and then bottled, corked, and sealed. The effervescing wine of Arbois, once so celebrated, is made by suffering the must to remain from twenty-four to forty-

eight hours in the vat, until a crust of the lees is formed as thick as possible before the fermentation begins. The moment gas bubbles ascend it is racked, left until a second crust is formed, racked again, and the double operation repeated until the must is limpid. It is then casked, and until the fermentation is complete, kept full. When the fermentation ceases, the cask is bunged. It is several times racked, and once fined before the following month, when it is bottled. Here are three modes in one country of making *mousseux* wine! Nor can the best wine of the three settle the question which mode is preferable, as the growth may cause the difference in the goodness of the product. Other modes might be cited, but the preceding will exhibit to the reader, in a clear point of view, the variety of treatment to which wines are subjected, and he will find others himself, if he wishes to follow the comparison further.

Neither with red wines is there any uniform treatment. The fine Burgundies of France are managed in the simplest manner, while great labour is bestowed upon wine of very inferior character. Some wines are left but a few hours in the vat, as in the Côte d'Or; others remain, as in the Lyonnais, six or eight days or more, and at Narbonne even seventy. Nor does any difference of product prove the discrepancy between one mode of treatment and another, where the wines are good. This being the case with every class, it may reasonably be inferred that much less of the peculiar excellency of wine attaches to its treatment after it enters the vat than is generally imagined. When the must has been judiciously placed in a state ready for fermentation, after due care had been exercised, the simplicity of all which remains to be done, and very frequently the opposite methods adopted from caprice or custom, to make it ready for the market, tend to substantiate this opinion, not that they exclude improvement in numerous existing cases of management.

In treating of the cares of the wine-maker, allusion has

been made to the diseases which the contents of his casks may sustain in the cellar before they go out of his hands, or are transferred to the market, in fact while they are yet preparing for that purpose. The due care of wine in the hands of the mercantile purchaser, or in the custody of the private individual, remains to be noticed. He who has a good cellar well filled, cannot too soon make himself acquainted with its management, and with the history of that beverage, which, taken in due moderation, may be reckoned among the most precious gifts of Heaven to the temperate and rational man. He should become acquainted with the phenomena of secondary fermentation, for that process often continues insensibly for a long period after wine is in the bottle, and will affect it accordingly under varying circumstances of locality or temperature.

The chemical analyses of the ingredients in the composition of wine have already been given in the second chapter. Secondary, or "insensible fermentation," as it is called, takes place in the cellar. This fermentation, from exposure to an exciting cause, sometimes becomes acetous, and spoils the wine. To this mischief distinct allusion is necessary, in order to point out its prevalence. This it is which, if neglected, most commonly brings on the principle of decay that had until then been resisted, and which would be so longer, were the due balance and proportion of the substances in the wine correct at first, and the decomposition of the tartar and sugar perfect. Durability in the cellar can only be ensured by the change of the sugar into alcohol to such an extent as to afford the necessary resistance. Where the sugar is great in quantity, the wine is less liable to turn acid in the bottle, if the fermentation in the vat has been good. Weak wines, in which the tartar is predominant and the principle of preservation feeble, are often lost irrevocably before the owner imagines it possible. It is against this degeneration of the wine that the purchaser or consumer has more particularly to guard, as of all the accidents to which wines

are liable after leaving the grower's hands, to fall into the acetous fermentation is the most common.

The description of a wine cellar of the most eligible class has already been given, to which there is little that can be added. It should, if possible, face the north, and in England consist of two divisions, one of which should be some degrees warmer than the other, for there are many wines which do best in a cellar of high temperature. Madeira, Sherry, Canary, Malaga, Syracuse, Alicant, Cyprus, and others, keep better in warm than in cold cellars. The wine of Portugal is so hardy, that even the cellars under the streets of the metropolis will little injure its quality, but this is not the case with other kinds. The wines of Bordeaux, Champagne, and the Rhone, should be kept in cellars where no motion can affect them, far from the vibration, or rather trembling, of the earth, from the traffic over granite pavements. They should be as far removed from sewers and the air of courts, where trades of a bad odour are carried on, as possible. These in wet weather do not fail to affect the wine, and give a tendency to acetous fermentation. No vinegar must be kept in a wine cellar, and the temperature ought to be unchanged throughout the year.

The fermentation of wine in close cellars is very apt to affect the atmosphere around to a considerable degree, and this is an additional reason why they should be well aired. The vapours which are found in similar cases produce sometimes distressing effects upon those who encounter them. Intoxication, vertigo, vomiting, deadness of the limbs, and sleepiness, are frequently experienced, but these disappear upon returning into the fresh air, and taking repose after swallowing an infusion of coffee, or acidulated water. There have been instances, however, in which dangerous paralysis has occurred from too long exposure to the carbonic acid gas, and death has ensued. It is proper, therefore, always before entering a close cellar some time shut up, and where the wine is thought to be in a state of fermentation, to halt a

moment, when the peculiar odour of the gas will be perceived. A lighted candle is a good test by the diminution or extinction of its flame. Upon first perceiving the flame to diminish in intensity, and burn fainter, it is a sufficient warning to retreat, until the cellar is purified.

The quantity of the wine in a cellar must be regulated by the rate of consumption in each class, so that too large a stock may not be kept of such as are least durable. This, in a large establishment, where a curiosity in wines is indulged, is a matter of much importance. The details, however, do not come within the scope of this volume. They are easily regulated by attending to the history of each particular wine, and the length of time since the vintage in which they were made.

Artificial heat may be introduced into cellars which hold the wines of the south, in very cold weather, with considerable advantage. This may be done by means of a chaffing dish. The cellar should be kept clean, and swept as often as convenient. In this climate a cellar should have an anti-room, and be entered through two doors, closing one before the other is opened, and keeping a thermometer, by artificial means, if natural ones will not do, at the same temperature throughout the winter and summer.

The choice of wine is a very difficult task, especially for the uninitiated. The difficulty is twofold: in the first place, no two persons have the same ideas of the flavour of any particular wine; secondly, the wines of the same vineyard differ in different years. Age, care in keeping, or accident, cause a change in the flavour of the same class of wine, perceptible to an amateur, though little noticed by strangers not accustomed to the variety. A purchaser should always, if possible, choose for himself the wine which is most agreeable to his palate. There is a good deal of pretension in the general taste for wine; and it has been asserted that oftentimes the worst judge complains first of the quality of the wine set before him. At one moment the example of a fashionable person will make a

wine held in very little estimation before, and perhaps very worthless in reality, the prime wine of the table for a season. In England it is this fashion, or accident, and not the true regard for vinous excellence, which makes the demand considerable for any particular species.

The first object to be attained in choosing wine next to the taste meeting the approbation of the purchaser, is its purity. Whatever be the country from whence it comes, whatever the class, if it be adulterated with any thing foreign to its own growth, it ought not to be selected. To distinguish genuine wine from that which is mixed requires great experience, when the species to be judged is of a second or third-rate class. The bouquet may be imitated, and even the taste, unless long practice has habituated the purchaser to a nice discrimination. It is needful to know whether new wines will keep or change, and to what alterations the flavour will be liable. Without this knowledge great loss may be sustained by a purchaser. Wines may appear good and bright which will not keep a year, and others that at first seem by no means deserving of preference, may prove in the end excellent. The private purchaser has no resource then but in the dealer of extensive connexions and high character, while the dealer himself must acquire by long experience and nice observation, the requisite qualification.

The taste is the criterion by which a judgment is to be formed; but a taste in wine, which can be depended upon, is a rare gift. The particular impression on the sense is so liable to alteration by the state of the bodily health, or by the last substance taken into the mouth, that it is difficult to depend upon. Sweet or spiced food taken a good while before will affect the judgment. Many recommend cheese, but after that all wines have an agreeable relish, while those who are in the habit of drinking strong wines or spirits lose entirely that nicety of taste so requisite in judging of the superior product of the purest growths. A habit of tasting the superior wines will alone give the

healthful palate the power of discriminating minuter differences in the aroma, bouquet, and *sève* of the choicer kinds. Such a palate judges by comparison of what ought to be found in the best growths, and the opinion is formed by an effort of memory upon previous sensation. Good wine is most frequently found among capitalists, who can afford to buy up large quantities in favourable years, the cheapest mode of purchase, who can bottle as it may be deemed most fitting for the contents of their cellars, and who have a reputation to lose. The peasants' wines on favoured spots, mentioned in a preceding chapter, do not bring a good price, because the owners have not capital enough to make them in the best manner, or keep them in stock until it is most eligible to offer them in the market. The same rule holds good with the merchant.

The higher classes of wine are transported to the purchaser with great care. The best season for removing the more delicate wines of France, and, indeed, wines of every kind, is the spring and autumn, when the weather is temperate. Cold or hot weather is equally prejudicial to the carriage of most wines. If transported in wood, they must be racked before they are removed; if in bottles, they should be decanted. Due precautions are taken to guard against the frauds of carriers on the continent, by running plaister on the heads of the casks, and covering them entirely with hoops. The transport in cases, of the high bottled wines, is most generally adopted. These cases are strongly put together, and carefully packed, each bottle being bedded in straw, after having been previously wrapped in cartridge paper. With Champagne the case is also lined throughout, to guard as much as possible against atmospherical influence. Champagne wine sent to America is embedded in salt, so that it is kept always cool. In this mode, bedded in salt and straw in very tight and strong cases, Burgundy has been successfully transported to India. The wine should be left in the cases until the moment it is wanted for use.

Wine of strength, intended to mellow in the wood, should be put into the largest casks which can be conveniently obtained, for most wines mellow best in a large body. They should be frequently examined, and if the cellar be moist, placed upon elevated tressels, touching no part of the walls. If the cellar be too humid, new apertures should be made, or the old ones enlarged. In such cellars the barrel staves are apt to decay, and let out the wine. Old cellars are better than those newly built, for it is observed that in the last the wine does not keep so well. The loss in a humid cellar by evaporation is much smaller than in one which is dry. Aqueous and no doubt some spirituous evaporation, by the pores of the wood, goes on while the wine is mellowing. This does not amount in a cask holding eighty gallons to more than a glass a month in a humid cellar; but in a dry one, though the casks are preserved better, the loss is frequently as much as two bottles in the same space of time.

The barrel should be placed, after the vintage, as observed in chapter the second, upon square pieces of timber, and these should rest upon traverses of a larger size, placed upon the floor three feet asunder. These traverses should not be more than five inches square, nor the uppermost pieces on which the barrels rest be more than three or four. The casks must be kept steady by wedges, and they must be so far forward from the wall of the cellar that the inner ends of the casks may be easily examined with a candle. Casks should never be placed upon each other when it can be avoided, as in case of accident, or for ullage, it is difficult to get the lower tier cleared. The French call this mode of placing casks *engerber*. When cellar room is scanty, however, it is difficult to dispense with the practice.

It is agreed that the longer the wine remains in the wood the better it gets, the uttermost term which it will bear in that state being known. Delicate and light wines should be bottled as short a time as possible, for this class gains

little by remaining in that state. Strong bodied wines, on the contrary, should remain long in bottle, in which state they improve best. Bottling, though a very simple operation, requires care and regularity in the performance. The admission of air into the cask during the process of bottling is inevitable, and if the operation be protracted, the wine, especially if it be of a very delicate or superior kind, is certain to be injured. The best plan in bottling delicate and expensive wines, which will enable them to be drawn off to the last drop in full perfection, without hurrying, or even to be drawn off slowly for drinking, is that adopted on the continent. A bottle of fine olive oil is poured into the cask, by which means acidity or mouldiness is effectually prevented. For a year's duration the wine will preserve its quality perfect. This arises from the oil covering the surface of the wine and excluding entirely all contact with the external air.

Bottles should be selected of good manufacture, and of equal diameter throughout, or they will be liable to break in the bin when piled high [1]. Twenty-four hours at least before they are filled the bottles should be cleansed and rinsed. Shot should never be used, for the acid of the wine is apt to act upon such as are left jammed in the hollow of the bottom. Clean gravel is better, or a small iron chain, the links minute, and yet loose as they can be procured. The bottles should then be reversed to drain in planks, having holes for the necks. Afterwards they should be rinsed in a little brandy, if the wine to be bottled is weak and of small body, letting them drain as with

[1] M. Collardeau of Paris invented a machine for trying the strength of French bottles. It consists of a forcing pump, with a regulator and manometre, to exhibit the pressure exerted. Bottles for Burgundy or Champagne average a resistance to internal pressure outwards equal to twelve or fifteen atmospheres. The weakest parts of a French bottle are at the junction of the neck, or at the bend in the bottom. The utmost number of bottles for Champagne that all the manufacturers can make, for the next year's bottling upon an extraordinary vintage, is 10,800,000.

the water, but not until quite dry. Very fine wines are injured by the brandy, and for them this process must not be used. The corks must be sound, well cut, so as to press equally on every part of the neck, and perfectly new, or they will impart a bad taste to the wine. They must be supple, or there is a chance of their breaking the bottles. Any corks with blackness, or the remains of the bark upon them, must be rejected. The corks should be driven home with a wooden mallet, the weight of which is regulated best by experience.

Bottles should be waxed, or rather stopped with a composition. It is the custom among many wine merchants merely to seal over the tops of the corks. This is not enough, the glass should be included, to prevent any air passing between that and the cork. In France, for every three hundred bottles two pounds eight ounces of rosin are mixed with half that quantity of burgundy-pitch, and a quarter of a pound of yellow wax, adding a small portion of red mastic; these are melted together, and taken off the fire when the froth rises, then stirred and placed on again until the mass is well combined. In some places tallow, in a smaller quantity, is substituted for the wax, for if there be too much the substance will not harden sufficiently; and if neither wax nor tallow are employed it will be too dry and brittle. The corks and a quarter of an inch of the bottle necks are dipped in this substance while it is hot, and then set by to cool.

When the bottles are corked and waxed they should be placed in a perfectly horizontal position, so that the cork be always in contact with the liquid. The soil on which the bottles lie should be first beaten very firm. Laths may be placed between each tier of bottles, and a bed of sand should lie in the interstices in each tier, and cover the bottles; for sand, though not commonly adopted, has great advantages. Piles a yard in height, the ends of the piles confined by wooden posts, are better situated than

when the bottles are placed touching the cellar walls, or in bins.

The rich wines *de liqueur*, such as Malaga, Syracuse, Alicant, and others, may be placed on their ends; but the dry wines must be arranged in the horizontal position. Upon the lowest tier of bottles the whole pile naturally depends, and these should be very well placed. The necks of this range of bottles should be supported either by laths, or by embedding them in the soil of the cellar. The lowest range of bottles should be about fifteen lines asunder, having a bit of thin cork between. By this means the upper ranges will be certain to come within the allotted space, as there may be some small difference in the size of a bottle or two. The laths used must be thicker than common, if the pile be more than from three to five feet high. The preferable mode is to have vertical supporters placed at the distance allotted for the ends of the piles, by which means they may be reared in the middle of the cellar, which, as already observed, is preferable to the common mode against the walls, where room will admit of it.

The wines are now left to ameliorate, according to their various qualities, a greater or less space of time. Yet thus excluded from external impressions, as it might be imagined, they are subject to decomposition—whether by the evaporation of their alcohol, or of some other constituent principle, it is not easy to ascertain. Those wines in which the saccharine principle exists in abundance, or where it has formed a strong-bodied wine, are certainly less liable to change compared with the more delicate classes, unless from some previous mismanagement. That in bottles, stopped in the most careful way, in fact sealed hermetically, wine is still subject to the action of external causes, though some of them are trifling in their nature, is an admitted fact. It is during the secondary fermentation, and the consequent deposition, that wines are apt to become acid in the wood, and what is called the insensible

fermentation in the bottle is a state in which it has the same tendency. If the fermentation be once perfected, and the tartarous and saccharine principles be completely developed, the wine being supposed to possess the just balance, it will be proof against change from any common cause for a long period of time, as may be supposed the case with hock, already mentioned in another chapter. Where the sugar predominates, alcohol sufficient is produced to ensure durability; but neither of these contingencies, it is probable, accompanies the cellaring of the finer and more delicate wines, which will not keep at most more than twenty years. It is in vain that the impurities are cleared away by racking, the cause of the evil still remains, perhaps, in the very delicacy itself.

The precipitation of wine in bottle is only the continuance of that which began in the vat, and keeping this in mind, the remedy is apparent. All wines deposit in this their last state of preservation, from the coarse crust of port to the *depôt pierre* of Champagne, or the almost invisible sediment in some other wines. These consist of tartar, colouring matter, and in white wines supertartrate of potash. Some substances are observed in particular wines, which have too much levity to sink, and always remain in suspension while the wine is acquiring age. This substance burned is found to be pure potash. The same wine will often deposit under two different forms in the same bottle. In Champagne, what is called the *depôt pierre* is like very fine sand or small flinty crystals, but it is nothing more than an appearance put on by the crystallized tartar of the wine. This substance is found in every vinous precipitation, in some form or another, more or less apparent. Those wines which deposit freely are observed to be the most durable. Wines which deposit much should be decanted into fresh bottles in case of removal, or the deposit may ascend and injure the wine.

When wines in wood are observed to ferment about the time of the equinoxes, they exert a great force upon those

barrel staves, which have decayed more rapidly than common, from being attacked with a species of dry rot, which generally begins in the wood nearest the cellar walls. The casks burst, and the wine is lost, unless the decay is observed early, and the wine drawn off, for which purpose the casks should be frequently visited and narrowly inspected, for the staves will quickly become so rotten in places as to yield before the finger. The French call these accidents, or rather the attacks of the rot, *coups de feu.*

The casks should be filled monthly, to make up for the loss by evaporation, or mouldiness will cover the surface of the wine and spoil it. Racking should be performed in the most careful manner, so as not to agitate the wine more than can possibly be avoided; and for this purpose, in the more delicate wines, a tube should be used, to prevent as much as possible all contact with the atmosphere. When the wine is labouring under any of the accidents while in the cellar, which are enumerated in the chapter on the vintage, to the same remedies laid down there recourse must be had.

It is evident that the preservation and amelioration of wine in the bottle depend upon its maturity in the wood, and upon the utmost possible freedom from all substances it may hold in suspension while so situated. The time for this operation differs with the character of the wine. The first class of the more delicate Burgundies should be bottled at the end of a year after the vintage, while the more generous and higher coloured should remain in wood four or five years, such as Pomard, Vosnes, or Chambertin; Bordeaux may mellow in wood for ten years. White wines may be bottled for the most part earlier than red, and so may the muscadines. The Rhine wines may remain in wood for many years; so may most of the southern dry wines; the effervescent wines, on the other hand, require to be bottled early. A clear, dry, cool atmosphere, with a northerly wind, after a racking within the preced-

ing six or eight months, so that perfect limpidity be obtained, is the best time for putting any wine in bottle. The early part of the month of March is the time preferable to every other.

A great object in the preservation of wines in the cellar is to keep the bouquet as long as possible, with that agreeable aroma which marks the highest class of wines, rarely met with save in those of France. This is the characteristic of the fine wines, and in some degree of all wines of the first quality which are pure, though in the secondary sorts it is less perceptible. Wines lose their bouquet by being kept too long. There is always a middle age, a maturity of years, so to speak, equally removed from the extremes of youth and senility, in which the finer wines should, if possible, be drank. When they lose any thing of their virtues or good qualities, it is certain that this maturity is past, although the wine may keep good for a long while, perhaps for many future years. It is an error, caught up from the notion that old axioms are indiscriminately correct,—it is an error to suppose that the wine which will keep long should only be drank when it will keep no longer. Mere age is no criterion of the excellence of wine, though a certain age is necessary to carry it to the state when it is best for the table. Wines differ in the quality of endurance, and proportionably in the time requisite for improvement. Burgundy of the first class, it is an acknowledged fact, will support itself to twenty years, but after twelve or fourteen it does not in the least improve; and the third year in bottle, or the sixth from the vintage, is the time when it is most perfect in every good quality for which the wine is famed. Good Champagne, on the contrary, will often be found to improve for ten or fifteen years, and will support itself until thirty, and sometimes until it is forty years old. The best age for the use of this wine is about twelve years. On the other hand, hock is not in full perfection until it is forty years old, and it will keep well four times that term. The

red wines of Roussillon, though kept fifteen years in wood till they acquire a golden tinge, are then bottled, and kept seven years longer, and after that continue to deposit. These wines keep well for a century and a half. The luscious wines keep long, and the dry wines of the south, Sherry, Canary, and others of a similar class, endure for a long term. But this endurance is in no case a proof that wine, at the extreme point of its durability, is in the highest perfection; for, on the contrary, the term age can only be rationally used when intended to comprehend the fitness of wine for drinking, and to describe that which is arrived at maturity, as the word "new" might explain wine not yet arrived at the full development of its qualities for use. Many wines, which keep well to a great age, lose some of their vinous qualities notwithstanding. Port wine, when it is old, retains but a very small proportion of its vinosity. Time is requisite to destroy the fiery mixture with which it is adulterated, or the potency of the brandy; but before that moment arrives, the vinous characteristics are generally gone. Tawny port may be very good, and well-mellowed brandy wine, but it ceases to possess the original qualities of the juice of the Oporto grape. It is important that this should be borne in mind. It will render the very small quantity of first-class port wine which comes to England more valuable, as this alone can be drank nearest the vinous state.

The characteristic bouquet of the finest and best wines cannot be transferred, because the delicacy cannot be imitated, and both accompany each other. A taste may easily be imparted to wine by artificial means, but this cannot deceive the palate well acquainted with what is genuine. Age softens what the French call the *sève* of the finer wines, or their spirituous aroma, but it is often fatal to the bouquet. To preserve both perfect, the best method is to take care that the casks are kept well filled with wine of the same vineyard and quality, to bottle it at the exact time, and only to remove it for the table. The finer wines

will not bear any mixture, and the barrels should be kept filled, by putting in pebbles well washed and dried in the sun, rather than by the introduction of any different species of wine, or any but that of the same vineyard, and spot of the vineyard to which the growth belong.

The French allow no dry wines of the first class to be grown out of their own country, and it is difficult to substantiate either a charge of vanity or error against them on this account. All other dry wines but their own prime growths they rank in the second class, and this rule has been observed in the list of wines in the sequel, with the exception that the highest class of hock and amontillado sherry, on account of their delicacy, and not bearing any intermixture, seem entitled to such rank.

The mixture of wines not of the finest class, which will not bear it, that takes place while they are in the hands of the grower, and are mingled in fermentation, must not be confounded with that which is practised with the view of adulteration, treated of in a subsequent chapter. A weak wine, the product of a bad year, is mingled with a more generous growth, and respectable growers always state the fact to the purchaser, the object not being to cheat the latter by the imposition of a false growth, but to render agreeable a wine which would otherwise be found feeble or too sharp for the palate. New wine of a high colour, though of a good growth, is not agreeable to the taste, and in bad seasons possesses frequently an earthy taint, but mingled with old white wine it becomes excellent when duly mellowed. Sometimes the wine of one year is mingled with that which follows, if one crop has been deficient in body. White wines, which have contracted a yellow tinge, are frequently poured over the lees of red, or are mingled with a deep coloured red, to lighten it; but such wine cannot be bottled for some time afterwards. The wine thus treated is found to be ameliorated when judgment is shown in the proportion of each kind which is used. The wines of Torins, in Burgundy, according to a

distinguished French writer on the subject, when mingled with Romanèche or Chénas, keep longer, and are better drinking than when kept separate. The price of both kinds of wine is the same, and the only object is to obtain by the mixture a better article. Thus the use of what the French call *vins râpes* is unobjectionable, being only boiled wines to deepen colour, made for the purpose. Champagne is mingled with its neighbouring growths to prevent too great an effervescence, which frequently happens when the wine is bottled from one vineyard. This mingling takes place generally for the purpose of improving the wine, and consisting of no foreign or adventitious mixtures, may be regarded as perfectly legitimate. The mixture of the Moguer wines with the second class of sherries in Spain, to lower them to cheap sherries, is legitimate. These mixtures are avowed, and the price of the wine lowered accordingly. Brandy and syrup of raisins are mingled with the wines of France to please the foreign palate, but never for home consumption. Such is the *travaillage à l'Anglaise* at Bordeaux with the wines for England; the quantity of spirit of wine added to the very purest and best kind is about six per cent. But Spanish wine, or the Rhone growths, are mingled also, because the standard of taste, as respects red wine in England, is formed upon the wines of Portugal, which are full-bodied, and often one-fourth alcohol.

It is from the habit of drinking so much brandied wine that the English palate, except among the more fashionable classes of society, whose port lies only upon the sideboard, is incapable of discerning and relishing, as they merit, the virtues of pure wine of any kind, but particularly of those most delicate and *recherché*. The effects of these wines upon the feelings are as different from those of port or the heavier wines as possible; they cheer and exhilarate almost insensibly, whilst there is a pleasant ease in the cheerfulness arising from their use, a buoyancy which it is in vain to look for in the spirituous heavy wines, which seem to

force on a boisterous artificial mirth, a joy that is like the laugh of unwieldiness or decrepitude, without levity and that airy feeling which the other kinds always induce. Their effects on the constitution, too, are diametrically opposite when taken largely. All wine which is mingled loses entirely the perfume and fineness of that which is pure, though it may, notwithstanding, be of very good healthy quality, when the mixture is of no other kind than that alluded to already, consisting of sound wine alone. With the individual who is in the habit of drinking only the prime growths at the proper age, no mixture in imitation of them can go off; it can only impose upon the ignorant.

There is something exceedingly susceptible in the nature of the finer wines. Thunder, the rolling of heavy bodies over the cellar, and some things scarcely credible, are said to occasion the renewal of the fermentation. That other matters in a fermenting state should affect the wines by affinity, whether in cask or bottle, may be credited upon the weight of testimony existing in proof; but that the presence of workmen or persons in cellars afflicted with particular disorders, should bring on acetous fermentation, as well as carry wines already in that state into one of putrid decomposition, is almost incredible. Yet such is averred to be the fact, and the presence of individuals in such a state of ailment, is said, on the authority of French authors of experience, to be indicated promptly by the wine, particularly in the spring and autumn, and even when the wine is fermenting in the vat. The fermentation of the wine in the cellar is perceptible by a peculiar odour throughout, familiar to persons of experience, by the force with which it is projected when a cask is opened, and by a species of glutinous mushroomy substance formed round the bung, and any other porous part of the cask. A hole should be bored with a gimlet in the bung, and stopped with a peg, to ascertain from time to time the state of the liquid. If the latter be projected with force through

the opening, it must be enlarged, that the carbonic gas may escape, and not burst the cask. Sulphur should be burned in the cellar, or the wine drawn off into a barrel which has been sulphured, but care must be taken not to do it so as to impart a taste to the wine. During this secondary fermentation a slight taste of acid is perceptible in the wine, which is evidently not the acetous fermentation, but only the production of carbonic acid. To this secondary fermentation, young wines which still contain some of the saccharine principle remaining convertible, are liable, and it is not at all injurious. Where this is not the case, as in old wine, the process must be stopped at all hazards by sulphur, or cold, and the wine racked, to prevent its degenerating into vinegar. Old wine should be kept as far removed as possible from new, and sulphur matches should frequently be burned near the casks of the older wine to purify the air, and repress any tendency to ferment. The sweet or luscious wines disposed to ferment should be racked into fresh casks, in which a third part of a quart of brandy has been previously burned. Spirit of wine would be still better, and might supersede the use of sulphur, so likely to impart its taste, taking care, in the case of dry wines, to lessen one-half the quantity.

Champagne is a wine which requires attention in keeping. The bottles should be carefully laid on laths, or in sand, in a cool cellar where air is admitted, and never be placed on their bottoms, as from this cause they will very speedily lose their effervescence. When once placed they should not be touched, but for removal to the table. If they are left in the cases the mark of the upper side should be carefully attended to. The Sillery is sometimes apt to effervesce after carriage, or on being placed in bad cellars. The bottles should in that case be placed on their bottoms for some time, and before drinking the wine should be kept an hour in ice. The most esteemed of the effervescing wines is the *vin crémant d'Ay,* which is the least frothy and the fullest bodied. The best Champagne in the

best year has a slight tinge of the rose-colour, which is one proof of its being of excellent quality. The deposit in Champagne, already mentioned in these pages, is not the only one to which the wine is liable. While the *depôt pierre* is considered a proof of the goodness of the wine, a black or yellow deposit, which will on motion float in the liquid, is a bad symptom, and shows that the wine is deteriorating fast. Deep cellars are best for Champagne, and as little variation of temperature as possible. The older it gets the less liable it is to be attacked by changes to its disadvantage. The better this wine is, the more it is liable to accident from heat, cold, or bad cellars; it will, however, in most cases very soon recover itself. The wines of France generally require the same kind of cellar as Champagne. It has been already remarked, that the wines of the south should be kept in such as are of a warmer temperature.

Claret, which is Bordeaux worked up with other wines, as already stated, is very apt to exhibit its artificial composition in the cellar by changing to a brick-colour. When this wine is not fine it should be racked over its own lees, agitated, and then treated as usual; by this means the evil will be removed. Claret is thought to drink best about ten years old.

The amelioration of wines in the cellar by age is not by any means clearly understood. Port wine, at first harsh and hot with brandy, is best judged by occasional trials; it might be supposed that the spirit evaporated, because that which was at first so spirituous, when it gets old, loses its strength in a great degree, and becomes more agreeable to the palate, though at the expense of its vinosity. Yet in other instances it may be conjectured that not the spirituous, but the aqueous part of the wine evaporates. M. Von Soemmering, after some experiments directed to ascertain if possible the actual truth, recommends that wine should be kept in glass vessels having their orifices closed with bladder. He asserts it ameliorates much quicker by

that mode of treatment, and he took great pains to ascertain the fact. He found that water escaped through dried bladder, but that the spirituous portion of the wine would not do so with equal facility. He, therefore, prefers glass to wood, in every state of amelioration; and covered with bladder, he asserts that wine will mellow more in twelve months in glass, than in the cask in twelve years. There is also the advantage of saving the wine lost in the wood by evaporation, the dispensing with ullage, and the preservation of the taste and colour. It was remarked that the shallower the glass vessel, and the wider the orifice, the sooner the amelioration was perfected.

Spirituous Madeira wines are ameliorated by heat and agitation. The bottle perfects the fermentation, but whether alone by the evaporation which takes place, is a difficult question to answer, whatever has been said about it. Wine has been placed in a bottle with a glass stopper, and found to have acquired mellowness from age, where there seems ground to believe no evaporation could happen, except through the pores of the glass. In such a case it is conjectured by some to be matter of proof, that the mellowness of wine arises from a change in its constituent principles, and a blending together of them more intimately. An insensible change in some of these principles may be effected by time and contact alone; the change in the colour of old wines proves there is ground for this supposition, and as many wines become more mature in large vessels, in which the pressure must be greater than in small ones, the mellowness is thus hastened. At all events, if the latter supposition be groundless, it can but take its rank with other conjectures on the same subject, towards fixing the certainty of which not a fractional portion of truth seems to be yet established.



Genuine Wine Manufactory.

CHAPTER XV.

ON THE ADULTERATION AND SOPHISTICATION OF WINES.

PREVALENCE OF ADULTERATION—OF BRANDY, AND ITS USES—MIXED WINES FORBIDDEN ANCIENTLY—INCREASE OF SPIRIT CONSUMPTION—VARIOUS MODES OF SOPHISTICATING WINE—OF MAKING OR ADULTERATING PORT AND CLARET—OBSERVATIONS.

The spirit of traffic, which attracts to our doors the luxuries of the earth, rarely limits its aim to legitimate profit. As in war all stratagems are lawful, so in trade the desire of gain wearies imagination with contrivances for turning to account every substance of which money can be made. To be over scrupulous about the mode would argue tardiness in the pursuit of an object, to which every generous feeling of life must be sacrificed if it intervene, and to gain which, honesty is only the best policy when

knavery is insecure from discovery. As an article of commerce finds a larger consumption, and the cost is increased by an extravagant taxation of two or three hundred per cent., the temptation to defraud is greater, because the profits are proportionably enhanced. The adulteration of wine, among that of other articles, has of late become almost a scientific pursuit. The clumsy attempts at wine brewing made a century ago, would be scorned by a modern adept. It is said that when George the Fourth was in the "high and palmy" days of early dissipation, he possessed a very small quantity of remarkably choice and scarce wine. The gentlemen of his suite, whose taste in wine was hardly second to their master's, finding it had not been demanded, thought it was forgotten, and, relishing its virtues, exhausted it almost to the last bottle, when they were surprised by the unexpected command that the wine should be forthcoming at an entertainment on the following day. Consternation was visible on their faces; a hope of escaping discovery hardly existed, when one of them, as a last resource, went off in haste to a noted wine brewer in the city, numbered among his acquaintance, and related his dilemma. "Have you any of the wine left for a specimen?" said the adept; "O yes, there are a couple of bottles." "Well then, send me one, and I will forward the necessary quantity in time, only tell me the latest moment it can be received, for it must be drank immediately." The wine was sent, the deception answered; the princely hilarity was disturbed by no discovery of the fictitious potation, and the manufacturer was thought a very clever fellow by his friends. What would Sir Richard Steele have said to so neat an imitation, when in his day he complains that similar fabrications were coarsely managed with sloe juice: the science of adulteration must then have been in its infancy.

It is to be lamented that adulterations of such wines as port may be so easily practised as to deceive very experienced tastes, owing to their spirituous strength and coarse-

ness. Any attempt to fabricate Romanée Conti would not thus easily answer, because the fineness, delicacy, and perfume of the wine are not to be copied. Four-fifths of the Oporto wine in the British market being of inferior quality, is peculiarly subject to imitation. The ignorance of many persons of the true taste of Champagne has of late caused the importation of a wretched and cheap manufacture from the continent, which is sold for the genuine article; but still larger quantities of a fictitious wine, under the same name, have been made here of common ingredients, and passed off at public places. Balls, races, masquerades, and crowded public dinners, are profitable markets for adulterated wines, and the practice is not confined to the metropolis.

By the adulteration of wine is not to be understood the mixture of two genuine growths for the sake of improvement already noticed, but in the first place, a clandestine amalgamation of an inferior kind of wine with one which is superior, to cheat the purchaser, by passing it off for what it is not: and secondly, what may be denominated with more propriety, the product of fictitious operations passed off as genuine growths, having little or no grape juice in its composition. The first of these heads may be divided into adulterations of wines before and after they are imported.

Wines adulterated abroad are generally so operated upon in the cellars of the exporter, and but seldom in those of the grower, who, when he has disposed of them to the wholesale dealer, ceases to have an interest in their fate; the dealer generally knowing how to take care that no imposition is practised upon himself. There may be instances in which the grower and dealer have an understanding or interest together; but this is not commonly the case. By the practice of mingling wines in the ports of wine countries for the English market, a facility is given for adulterating wine which comes to England beyond that which is sent elsewhere, because a taste accustomed to a pure wine

is much less liable to be deceived than one habituated to mixtures. The Dutch import most of their wines pure on the lees, and thereby show their wisdom. The northern nations of Europe generally drink them in the same state as they are drunk in the lands of their growth; some of the German provinces alone excepted. For England, however, no wine will do without brandy, and the delicious sherries of Spain, which are of a quality sufficiently spirituous by nature, and come over as pure as any wines to this country, must be strengthened for British consumption. The wines of Spain, are, however, no other way deteriorated abroad, and a good price will always procure good wine. Low priced sherries come over without concealment for what they are, and with what is done in England the foreigner has no concern. In England, sherry of the brown kind, and of low price, when imported is mingled with Cape wine and cheap brandy, the washings of brandy casks, sugar-candy, bitter almonds, and similar preparations. The colour, if too great for pale sherry, is taken out by the addition of a small quantity of lamb's blood, and it is then passed off for the best sherry by one class of wine sellers, and advertisers. The softness of good sherry is closely imitated. Gum benzoin is used to produce the counterfeit brown sherry, which in the real wine is given by boiled must. The whole is tempered in a large vat, and sold out in bottles of fifteen to the dozen, on which a profit is oftentimes made of twelve shillings upon every dozen impudently sold as genuine pale sherry.

Dr. Paris has made some ingenious observations, the result of experiment, upon the alcoholic principle in wine. If alcohol or brandy be mingled with water, in the proportion of one-fourth of spirit to a quart, this gives half a pint of pure brandy. The effect of such a combination, taken frequently, it is easy to comprehend, when applied to the stomach. The same quantity of alcohol, however, contained in a quart of wine, formed and combined with it in the natural process of fermentation, is by no means so

intoxicating, or prejudicial to the constitution. With the natural wine it is moderated in its effects, so as to exert much less power upon the stomach, and by consequence, is not any thing like as injurious. That this is correct there can be little doubt, from the test of daily experience. In England, the natural alcohol of the wine is not deemed sufficient. Wines containing twenty per cent. of brandy naturally, are strengthened by the artificial mixture of a quantity which is raw, and which never combines in the natural way with the wine itself, notwithstanding the practice of "fretting in" by the wine merchant. To this adulteration the injurious effects of the wine on the constitution are mainly attributable. How this difference between combined and uncombined alcohol happens, baffles the research of science to explain, but it is sufficient to know that such is the fact.

But the foregoing absurd and injurious practice is not alone followed by bad consequences to the constitution of the unwary individual, who drinks in years of suffering with the cup of momentary conviviality, it further renders the whole community liable to imposition respecting all wines, from depriving it of power to judge between pure wine and that which is deteriorated, and from making impure wine the standard of the general taste. It has already been stated, that to drink tawny port is to drink a wine after its vinous properties are destroyed by the process necessary to kill the spirit with which it is saturated; that by time evaporating too, as all the principles of good wine have done.

In the more delicate wines, by the admixture of brandy, the aroma and perfume perish, together with that peculiar freshness which renders pure wine so estimable beyond every other potable. In England, among common wine drinkers, it is the alcohol of the wine alone that gives a momentary elevation to the spirits, not at all different in its nature from that which brandy mingled with water will afford. The exhilaration from pure wine is of a very different character, either from the mode in which the spirituous

strength is applied to the stomach, and affects the nervous system, or from its combination with other elements. In the one case, as in Champagne, where it is true the carbonic acid gas may be supposed to produce the modification, though in the finer wines of France, as Romanée or Lafitte, it is the same thing, the spirits are elevated, and even a slight excess in the quantity taken passes away speedily, nor leaves any ill effect. In wine mingled with brandy, the exhilaration is the first access of fever, and the head and stomach suffer severely for the indulgence, not to comment upon the certain ruin to the constitution of the individual who follows the constant use of such wines, without taking them to excess, in the shape of indigestion, and ultimately of apoplexy or dropsy. Brandied and adulterated wines are the bane of Englishmen, though the ill effects may be slower in some cases than others; while, in like manner, diseases may not be so obvious that really owe their origin to them. The wish is patriotic and humane, that Englishmen could drink only wine pure and unsophisticated. That an abuse of the good things, which the Creator has bestowed for the enjoyment of man, should be followed by just punishment in the miserable consequences that succeed excessive indulgence, is just and natural. The intemperate man, in the vinous product preferred in England at present, will find his reward; but it is singular enough, that in proportion as drunkards have abounded in any nation, the wines drank there have been more sophisticated, and strengthened with substances foreign to them. The healthy stomach relishes plain food; the sickly one must be pampered with savoury or spiced dishes. The truth of this is clear; we have the "mixed wine" of the Hebrews in proof. Like the taste too general in England, from which the better classes and people of information are most exempt, "strong drink" is that which is most desired. Pure wine is chill to the arid and burning stomach. The Jews knew nothing of the product of the still, and strengthened and mixed their wines with stimulating and intoxicating herbs. The denunciations in the

Scripture are against mixed wine: "They that go to seek *mixed wine*."—"Woe to them that are mighty to drink, and men of strength to *mingle strong drink*:" (*shekhar* שכר). The Greeks and Romans rendered wine more intoxicating by the use of strong aromatics. Turpentine, resin, and pitch were mingled with them for this purpose. Distillation being unknown, spices or hot peppery substances, as our East Indian countrymen sometimes practise now, were had recourse to in certain countries; but the very use of these adulterations shows that the stomachs which relished them had either first been debauched and debilitated by excess, or that health and social cheerfulness were not objects in the vinous draught, but that a stimulant, operating rapidly and producing ebriety with speed, was the real thing sought after. In the West Indies formerly, when a stomach was well nigh worn out, the acceptable stimulant, taken as a cordial, was a glass of brandy, with Cayenne pepper in it, usually termed "a flash of lightning." That to the generality of the nations of the north, accustomed to drink quantities that would be instant death to those not inured to them, of the burning product of high distillation, the generous soul-enlivening juice of the vine, in its pure state, should be cold and inert as spring-water, is not a subject for marvel. Pure wine was not made for men who can drink two or three bottles at a sitting, and scarcely deserve to be ranked above the brute creation. Burgundy, or Château Margaux, to such palates would be spring-water. If they drink wine at all, it must be adulterated with alcohol; yet the northern fondness for strong drink does not prevent all the nations of the north from relishing natural wine. In Sweden, where ardent spirits are much drank, wine is enjoyed, as in France, unadulterated, in its genuine state; and even in Petersburgh, where the strongest product of the still is consumed, respectable people drink wine in its pure state.

The consumption of wine in this country has not increased with the increase of population, while that of

spirits is enormous. The following will show the lamentable increase of spirit distillation in 1830, for home consumption only, in England, Scotland, and Ireland:—

Population.	Wine, 1831.	Spirits, Home Made, 1830.	Spirits, Foreign.	Colonial.	Total Spirits.
13,889,675 } 2,365,930 }	Imp. Gals. 6,928,466 {	7,732,101	1,267,397	3,503,141	12,502,639
		6,007,631	38,967	137,806	6,184,404
7,500,000	795,909	9,004,539	10,406	18,011	9,032,956
23,755,605	7,724,375	22,744,271	1,316,770	3,658,958	27,719,999

Thus the inhabitants of the United Kingdom swallow above a quart of wine a head, man, woman, and child, and more than a gallon of spirits annually, to say nothing of oceans of malt liquor, beside home-made wines, cider, and perry. (As the fondness for spirit increases, that for wine diminishes.) The cuticle on the hand of a blacksmith is hardened by the hot iron, and cannot distinguish objects by the sense of feeling; in the same manner the stomach of the spirit drinker is lost to the healthy freshness of wine, being too cold and unseasoned for his seared stomach, while adulterations or coarse mixtures of the grape remain undiscovered.

It is, after all, a very indifferent compliment to good taste, that in a consumption of 6,628,496 imperial gallons of wines consumed in England in 1830, even Canary, Fayal, and Sicilian made 5·54 per cent., Cape 8·14, but French only 5 per cent. of the whole. Rhenish made but 1; Madeira, 3·44; Spanish, 32·63; while Port was 44·25! out of 100 parts. The least vinous and coarsest in taste, but most potent in spirit, was, as usual, preferred; for not more than one-fifth of the Port wine imported can be considered of the better quality. It is something, however, to find, that in 1833 the Port had fallen to 43·85,

and the Spanish had risen to 35 : it is to be lamented, on the other hand, that the French had fallen from 5 to 3·81.

In the better Bordeaux wines, even "when prepared" for the English market, the fine qualities of the pure wine still exist, though they are to be less strongly traced. In the wines of Portugal they cannot be traced at all. Indeed, so coarse are three-fourths of the wines commonly drank in England, from the foregoing cause principally, operating as a disguise for the vilest imitations, that they might easily be made without the juice of the grape forming a part in the composition. A person named Legrand proposed to give wine, and even vinegar, not from the grape, the same apparent qualities as if they had been, by means of tartaric, citric, and oxalic acids, introduced into the wash or liquors during or after fermentation. The acids also to be mixed with spirituous liquors, for the purpose of converting them by acidification into vinegar, or by distillation into brandy. The same vegetable acids to be employed to increase the strength of vinegars, and imitate those made from wine. This idea is crude enough, but the intention is not the less dishonest. If by such combinations perfect wine could be made, then have we arrived at the mystery of uniting substances which possess chemical affinity, while we had hitherto discovered only the secret of analyzation—a union which nature had sealed until now in darkness. If it be possible to make perfect wine this way, why not embody the diamond from carbon, or, triumphing over the ancient alchymists, fill our coffers with gold of our own fabrication? It is not worth paying so much money for wine, if it be deficient in all which gives wine the first place in human luxuries, if spirit and colouring matter are productive of the same effect; if the aroma, bouquet, and liveliness of the genuine liquid are neither wanted nor valued, and heavy dull intoxication, and the brutalization of the faculties, are preferred to a pleasant elevation of the spirits, and to the draught which enlivens without injury. It is as little detrimental to the stomach, and much more beneficial for the purse, to drink none of

the juice of the grape at all, but only that beverage, quantities of which have been passed off for wine at country inns and similar places. Yet the mistake is not confined to the country parts of England, of judging wine by its potent effects, rather than its vinous qualities. Why have recourse to natural wines at all, if combinations, formed out of the discoveries made by chemical analysis, will answer as well? It is as probable that tartar, spirits of wine, and other ingredients should combine, and form wine under the hand of the experimentalist, as that raw brandy should combine with fermented wine. Brandy, cider, sugar, tartaric acid, logwood, or elder-berries, and alum, in proper proportions, would make a beverage not distinguishable from a vast deal of what is drank for wine in this country, and not be more injurious. In fact, quantities of wine have been made of similar ingredients, and yet, on any one well acquainted with the pure wine, scarce as it is, the imposition could not be practised. The wines of Portugal, Spain, and Sicily, are, from the deterioration of their vinous properties by brandy, most liable to imitation; for in proportion as the true virtues of wine remain, the difficulty of imitation is increased.

It cannot be denied that the wines of Bordeaux, called "claret" in this country, though not adulterated like the wines of Portugal, suffer injury before they are considered fit for the English market. It has been thought necessary to give the pure Bordeaux growths a resemblance to the wines of Portugal, in some respect, in consequence of the false taste which has been given by the use of legislated port; thus one mischief treads upon the heels of another. Bordeaux wine in England and in Bordeaux scarcely resemble each other. The merchants are obliged to "work" the wines before they are shipped, or in other words, to mingle stronger wines with them, such as Hermitage, or Cahors, which is destructive almost wholly of the bouquet, colour, and aroma of the original wine. So much are the merchants sensible of this, that they are obliged to give perfume to the wine, thus mixed, by arti-

ficial means, such as orris root and similar things. Raspberry brandy is sometimes employed, in minute quantities, for the same purpose, and does very well as a substitute in England, though any Frenchman conversant with the wines would instantly discover the deception. The perfume is sensibly different from that given by nature. These operations cause the clarets of England to be wines justly denominated impure, though not injurious to the constitution. There is nothing in them which does not come from the grape. It is only encouraging a coarseness of taste, which, after all, is but matter of fancy, while wholesomer wines cannot be drank. When old, claret is apt to turn of brick-red colour; this arises solely from mingling it with more potent wine.

In the south of France, Malaga, Lacryma Christi, and Cyprus, are imitated by mingling wines of age with boiled luscious wine of a later date; but there does not appear to be in their adulteration any thing but what comes from the vine, and they are therefore no more reprehensible than because they are passed off for the wine they imitate. Cette ports and sherries are of this class, brandied.

Thus far belongs to the wine whilst in the hands of the foreigner, or when it is transmitted to the hands of respectable merchants in England, of whom alone wine should be purchased. But there are large quantities of what is miscalled claret, manufactured in this country, for making which, as well as *improved* claret of prime character, many receipts are extant. A very inferior French wine, sold to the adulterators at a few sous a bottle, is now frequently mingled with rough cider, and coloured to resemble claret, with cochineal, turnsole, and similar matters. This is pronounced of fine quality, and sold as such in this country. Certain drugs are added as they appear to be wanted, and the medley, to which a large profit is attached from the imposition, is frequently drunk without hesitation, and without any discovery of the cheat.

New claret is made to imitate old, by uncorking and pouring a glassful out of each bottle, then corking the

bottles, and placing them for a short time in an oven to cool gradually; they are then filled up again and finally corked, and passed for wine nine years old. Port is put into warm water, which is urged to the boiling point, and then, as already stated, the wine is put into the cellar, and deposits a crust that looks the growth of years. Madeira is thus, as before remarked, artificially treated. The ancient fumarium seems to have had the same object of forcing a premature mellowness.

A vast deal might be written upon the methods adopted and ingredients used in carrying on these deceptions; the present object is only to touch upon the subject, in order to illustrate certain principles recorded in this volume; but more especially to show the reader how necessary it is to form a just judgment, and obtain a perfect acquaintance with genuine wine of every species, that he may thereby be better enabled to escape imposition.

Champagne is a wine in which adulteration is most obvious to such as are well acquainted with it in the genuine state, and it is adulterated in England with more boldness than any other. There is a very weak Champagne made in the country, which was until very lately consumed wholly on the spot, incapable of resisting decomposition for more than a year. This certain shrewd wine-makers from England have discovered, and imported as the best Champagne. It is without the flavour or bouquet of the genuine wine; it froths or effervesces freely, but the colour is paler than that of better quality. This wine is not worth more than a few sous the bottle in the country. In England it is purchased and drank for the genuine article by those who are only now and then introduced to wine of that name; yet the exquisite bouquet of Champagne, so different in the genuine kind from all others, is the best mode of detecting the bad kinds. Some will direct attention to the effervescence, and assert, that in genuine Champagne it is marked by a peculiar kind of sparkle. This is no criterion; for carbonic acid gas differs in quality or appearance nothing at all, where the fluid may possess

a very opposite flavour. The bouquet of genuine Champagne cannot be imitated. Gooseberry wine itself is often passed off for Champagne upon the inexperienced, and the full price of the genuine wine exacted. The very bottles are bought up for the purpose of filling with gooseberry wine, and are then corked to resemble Champagne. The most wretched wine that could be bought in the country at a franc a bottle is known to have been imported, to throw out the wine, and fill the bottles with Champagne from the gooseberry, on which a profit of forty or fifty shillings a dozen has been made. In France this wine is never adulterated by the grower, who has the wine of various prices and qualities, and is interested in its reputation; he sells the inferior kinds for what they really are.

An advertiser in London of the "best Champagne," at a price at which it could hardly be purchased at Epernay, was suffered to obtain a verdict for libel against a weekly periodical some time ago[1], because it exposed the deception. It was still more extraordinary that no defence was made, as it was a public duty to make one, and a hundred credible persons could have proved that the best Champagne was not to be purchased at such a rate in France. The first charge per bottle at Epernay was then from three and fourpence to three and tenpence; Sillery four and sevenpence to five shillings; carriage to the sea, freight, duty on bottles and on wine not included. There are inferior wines of Champagne down to the fifth or sixth grade, the lowest and poorest of which may be purchased at tenpence a bottle in the country. They will only keep from a twelvemonth to eighteen months; but the best Champagne was then out of the question here at the price of five shillings and sixpence.

In imitating the still Champagne, an accusation has been made against the numerous adulterators that lead is

[1] The *Literary Gazette*, which might easily have reversed the tables. A verdict in favour of the trash was given, and 50*l.* damages!

used in the process. In France, it does not appear that lead in any form has been employed in making or altering their wines, though in Germany, a century ago, it is said to have been detected. On the thirteenth of March, 1824, a member of the Chamber of Deputies moved for a law to punish the practice. The motion was rejected, and very properly, because neither litharge, nor any other proportion of lead, was shown to have been used, nor was any instance cited in which it had been discovered, though an ordinance was made against its use in 1696. Wines seized in France as bad, by the council of health, and analyzed, have never shown the presence of lead. From 1770 down to 1825, not one instance had occurred in the analysis of the wines which were brought to Paris of this dangerous intermixture, upon the authority of M. Cadet Gassicourt, whose duty it was to examine them. M. Jullien, by a course of experiments, proved that litharge will not deprive wine of its acidity; that it decomposes the wine, if much is added to it, and, if little, the wine remains unchanged, and that it is easily detected, but in no case does it alter the acidity of the wine. This able writer concludes, that tartar in some form has deceived the observer. Potash, too, may have been taken for it, but in no case has it been of late years detected in France. Fixed alkali has been employed frequently to correct acidity; but it does not appear that, in France, adulterations of any other kind than the mingling of different wines is practised in a manner worthy of notice here. Water and perry seem to be the mixtures which have come mostly under the lash of the law there. A small quantity of sugarcandy and cream of tartar is sometimes added to Champagne in bad years; but the quantity is so small, it cannot be called an adulteration. In truth, the detection of adulteration in wine drunk in the country is so certain, if substances not vinous be employed, that it may be concluded the practice is not by any means general, while that of the same nature as takes place here is wholly unknown. It would not be

easy to imitate cider in Hereford or Devon, so as to deceive the people who are constantly in the habit of drinking it genuine.

In England Champagne has been made from white and raw sugar, crystallized lemon or tartaric acid, water, home-made grape wine or perry, and French brandy. Cochineal or strawberries have been added to imitate the pink. Such a mixture at country balls or dinners passes off very well; but no one in the habit of drinking the genuine wine can be deceived by the mixture. The bouquet of real Champagne, which is so peculiar, cannot be imitated; it is a thing impossible.

Acidity in wine was formerly corrected in this country by the addition of quick lime, which soon falls to the bottom of the cask. This furnishes a clue to Falstaff's observation, that there was "lime in the sack," which was a hit at the landlord, as much as to say his wine was worth little, having its acidity thus disguised. As to the substances used by various wine doctors for flavouring wine, there seems to be no end to them. Vegetation has been exhausted, and the bowels of the earth ransacked, to supply trash for this quackery, which nothing will annihilate but the habit of drinking pure, unbrandied, unadulterated wine of the best vintages, let the wine be of the first or third class. Of this, people will soon come to see the wisdom and good sense. It may be asked, how they are to obtain it? The reply is, go or send to the country. A few families might combine to pay a trustworthy person at first to go to the wine-grower, or deal at home with a particular merchant, and pay a good price to a man of honour, whose determination it is to keep all classes of his wine from the pure offspring of the grape.

It is impossible to calculate what the loss to the public in revenue must be by the adulterations of wine in this country. The basis of most of these is Cape wine, which pays a low duty, and is consequently most conveniently useful in this transmutation of wines for purposes of lucre.

It can hardly be supposed, that when the population of the empire was ten, and when it was sixteen millions, no more wine was consumed. The deficiency must not all be charged to the badness of the times, nor to the increase of the cost of port wine, which, notwithstanding the stationary character of the demand, rose in price in a very rapid manner after 1753. England took then from eleven to twelve thousand tuns; and now, when she takes on an average only two or three thousand tuns more, it is found to cost many times as much. The truth is, that a vast quantity of fictitious port is passed off in this country for that which is real, and the idea deserves credit from the very considerable importations of wine which can only be used for such purposes, to which two or three and twenty hundred tuns of Cape, a quantity of Beni Carlos, and of Figueras wines undoubtedly contribute, to say nothing of what is made without having in its constitution a single drop of grape juice at all.

In a most useful work, professing to treat of the art of adulteration, the following mode of managing this branch of trade is well exposed[1]. It relates to the first class of manufactured wine in contradistinction to the second, which has none of the component parts of wine at all in its composition. It is premised that all wine manufacturers keep large vats for the object of similar fabrications. Beni Carlos wine can be purchased, including duty, for thirty-eight pounds a pipe; Figueras for forty-five; Red Cape for thirty-two; of mountain wine, to follow the author, "a small quantity may be added, if required, to soften and give an appearance of richness. Sal tartar, a portion to occasion the compound when bottled to crust firm and soon, dissolved with a proportionate quantity of gum dragon, to impart a fulness of flavour and consistency of body, and to give the whole a face. Berry-dye, a colouring matter extracted from German bilberries, and known

[1] Wine and Spirit Adulterators Unmasked. Robins & Co. 1 vol. 12mo. 1829.

under this name. In addition to these may be introduced brandy-cowe (the washings of brandy-casks), which costs nothing, in the proportion of about three gallons to every hundred gallons of made-up wine, in fabricating the second quality of fictitious wine. Into this may be racked as follows:—

	Imp. gal.	£.	Imp. gal.	£.	s.	d.
2 Pipes of Beni Carlos	230	at 38	per 115	cost 76	0	0
2 Pipes of Figueras	230	45	115	90	0	0
1½ Pipes of Red Cape	137	32	91	48	3	6
1½ Pipes of Stout Good Port	165	76	115	109	0	10
1 Pipe of Common Port	115	63	115	63	0	0
Mountain	20	60	105	11	8	7
Brandy-Cowe	20	0	0	0	0	0
Colouring	3	0	0	0	3	1
Etceteras: 2½lbs. of Salt of Tartar and 3lbs. Gum Dragon	0	0	0	0	4	0
Extra allowance for loss by bottoms ..	0	0	0	3	0	0
8 Pipes Port, 115 gal. ca. Pipe	920 Imp. gallons.			£400	0	0

"The value of the empty pipes and hogsheads is 5*l.* 5*s.*, and not being deducted from the amount in this example, is supposed to pay all expenses of cartage, that part of the etceteras which may not be sufficiently charged, or paid for by the water used to dissolve them, and which is sold as wine, and for any additional loss which may be sustained by the bottoms. Thus, then, we have eight pipes of superior port wine, made up according to the best and most approved plan, and which stands advertising dealers at 50*l.* per pipe of 115 imperial gallons, every expense included, and reckoned at the very outside. The wine thus made up, if drawn off in bottles of the size of sixteen to the gallon, old measure, and adding a charge of 6*d.* per dozen extra for corks, would cost only 16*s.* 9*d.* per dozen!"

Wines under the names of British Madeira, Port, and Sherry, are also made, the basis of which is pale malt; sugar-candy, French brandy, and port wine are added in small quantities to favour the deception. So impudently

and notoriously are these frauds practised, and so boldly are they avowed, that there are books published called "Publicans' Guides," and "Licensed Victuallers' Directors," in which the most infamous receipts imaginable are laid down to swindle their customers. One of these recommends port wine to be manufactured, after sulphuring a cask, with twelve gallons of strong port; six of rectified spirit; three of cognac brandy; forty-two of fine rough cider; making sixty-three gallons, which cost about eighteen shillings a dozen. Another receipt is forty-five gallons of cider; six of brandy; eight of port wine; two gallons of sloes, stewed in two gallons of water, and the liquor pressed off. If the colour is not good, tincture of red sanders or cudbear is directed to be added. This may be bottled in a few days, and a tea-spoonful of powder of catechu being added to each, a fine crusted appearance on the bottles will follow quickly. The ends of the corks being soaked in a strong decoction of Brazil wood, and a little alum, will complete this interesting process, and give them the appearance of age. Oak-bark, elder, Brazil wood, privet, beet, turnsole, are all used in making fictitious port wine.

The wines of Madeira are in like manner adulterated, or wholly manufactured in England, which, from these devices, may justly claim the title of a universal wine country, where every species is made, if it be not grown. The wine thus manufactured, is not served up at the tables of the rich, but is principally consumed by those who only drink wine occasionally, on the presence of friends. Not that the better classes of purchasers escape being imposed upon, but that they are cozened in a different manner, by giving West India Madeira an artificial flavour, and passing it off for that which is East Indian, and in consequence much dearer. The basis of the adulteration of Madeira itself is Vidonia, mingled with a little port, mountain, and Cape, sugar-candy and bitter almonds, and the colour made lighter or deepened to the proper shade, as the case may

require. Even Vidonia itself is adulterated with cider, rum and carbonate of soda, to correct acidity; sometimes a little port or mountain is added. Bucellas, Cape itself, in short, every species of wine that it is worth while to imitate, is adulterated or manufactured in this country with cheaper substances. Common Sicilian wine has been metamorphosed so as to pass for Tokay and Lacryma Christi; even Cape wine itself has been imitated by liquids, if possible, inferior to the genuine article.

A large quantity of bad wine is passed off in London in exchange for other goods. This opens another system of dishonesty and fraud, purchaser and seller each striving to outvie the other in trickery: the wine-seller generally, it need not be remarked, having the advantage on his side. It may be well for the government of the country to consider whether some obstacle cannot be thrown in the way of these practices by legislative enactment. The possession and use of large casks, or rather vats, absolutely necessary for the purposes of adulteration, and of little advantage to the dealer who does not contemplate similar frauds, might certainly admit of the control of the excise officers. However, in this as in all cases, persons of good sense can take care of themselves by the exercise of a sound discretion.

There are a variety of tests which may be applied to the more vulgar adulterations by those who do not understand chemistry. Sulphur will detect the presence of lead, turning the wine black or dark if it be present; sulphurated hydrogen gas, acidulated by muriatic acid, will detect it in a moment. Alum is detected by equal quantities of lime water and wine being mixed and examined within sixteen hours, when if there be no alum, crystals will be found, easily separable by filtration, a muddy deposit will be seen if there be. The presence of colouring bodies is least injurious, and may be discovered by numerous tests, such as lime-water, if beet-root has been employed, acetate of lead, bilberries, elder or logwood. The best mode, where adul-

teration is suspected, is to apply to any chemist of tolerable skill, who can easily analyze the wine.

According to M. Chevalier, the following are the best wine tests for the colouring matter: potash, applied as a re-agent, to ascertain the natural colour of the wine; this it changes from red to bottle or brownish-green. The change of colour produced by this agent, it must be remarked, is different in the wine of different ages. No precipitation of the colouring matter takes place when potash is applied. Acetate of lead, lime-water, muriate of tin with ammonia, and with subacetate of lead, should not be employed, because incapable of producing uniform colours with wines of natural colour only. Ammonia may be employed, the change of colour it produces not perceptibly varying. It is the same with a solution of alum, to which potash has been added, which will answer the purpose.

The best precaution against the adulteration of wines would be an act of parliament, levying a heavy penalty upon all sellers of wine, on the detection of any substance in the same that is not strictly vinous, upon an analysis made by competent persons. Such an enactment exists in Paris, and it might be introduced into London with good effect. The adulteration of wines would thus be much more difficult, and though the mingling of inferior with superior wines could not perhaps be abolished, it would be less frequently practised, whilst the making of fictitious wines would cease. The penalties should not be so excessive as to defeat the end, as is the case with some of the excise laws, which are in many cases at war with the objects they have in view, and in practice as secret, dark, and impenetrable as those of the inquisition. They are destructive of the social compact, and of the principle of justice (the basis of all law), by encouraging men to commit offences that they may, through obtaining accomplices in their own frauds, make them legal victims, and obtain a further reward by their own infamy. What other con-

struction can be put on the permission of a man to sell smuggled goods, and put the money into his pocket, that he may convict the individual he has induced, perhaps by falsehoods and entreaties, to purchase. No government, on any consideration, should violate, for the plea of revenue or any other excuse, the great fundamental principles of natural morality—the natural justice of universal conscience. Such enactments are unworthy modern civilization, and will not much longer be tolerated in the code of civilized nations. The revenue must be protected, but in so doing, both in money and morality more may be paid than is at all politic.

Laws against adulteration of wines are of old standing in this country, and it is only of late years that they seem to have given way before enactments against the state crime of cheating the excise. Anciently there was an effective company of vintners, who took care of similar matters; and mention is made of the lord mayor, in 1426, flinging a hundred and fifty butts of adulterated wine into the kennel. Charles II., among whose vices the want of regard for good wine is not enumerated, signed an act which showed that he was determined there should be no mixture of any kind in his wine, by prohibiting the use of any substance whatever, even wine itself, from being intermingled. This act, 12 Car. II., might be modified with great advantage in the present day. As it stands it is inoperative, for no merchant can fine or flavour his wines if it be enforced, and, if taken literally, there are a great many substances used by adulterators which are not forbidden in its clauses. To such an extent is this base mode of swindling carried in the present day, that some severe measure seems necessary to restrain it, for to prevent it altogether is impossible, unless the public will declare the purity of the article rather than its cheapness their main object in purchasing, and more especially make it a rule never to buy of wine sellers who advertise cheap wines. There is no scarcity of good wine, if it be wisely sought

after, and paid for liberally. Government is more especially bound to do all in its power to aid in this desirable object, because, were wine free of taxation, it would not be worth while to adulterate it, and the mischief would remedy itself, the fraud on the revenue as well as on the purchaser tempting dishonest traders by its double profit.

The various docks on the Thames do not secure purchasers from the malpractices of dishonest dealers; in this many are deceived. It has been naturally, yet erroneously imagined, that wine purchased in the docks must be a pure article. Malaga sherry is constantly shipped to England for the real sherry of Xeres; Figueras for port, and so on. Port wine being sent from the place of its growth to Guernsey and Jersey, and there reshipped with triple the original quantity for the English market, the docks are no security. Wine too may be racked in the docks into casks of less measure, and there is plenty of room for fraud in this apparently well-timed permission, of which the dishonest have known how to avail themselves.

Finally, the best test against adulterated wine is a perfect acquaintance with that which is good. Those whose test of wine is the degree of spirituous strength it affords, may remain satisfied with wines as they are. They who commend the purple draught for the warmth it imparts to the stomach, which has been perhaps for years at the temperature of a hundred and twenty of Fahrenheit, can only value it in proportion as it stimulates the already over-excited organ. Swallowers of Madeira and Cayenne pepper, cognac and capsicum, proof whisky, and similar fiery liquids or compounds, may purchase their wines any where. Indeed, be the desired virtue of potency but mentioned to the adulterator or maker, it will be provided high coloured and burning enough for the most tropical taste, or for Chaubert himself. To such this chapter is at least a "vox, et præterea nihil." But by those who seek not "strong drink," nor "mixed wine," who relish the healthful glass that cheers without inebriation, that enlivens conversational

ideas without coarse mirth, and kindles social friendship in the hour of relaxation, without passing the limits of well-regulated enjoyment, these remarks may be better received. The effect of pure wine upon a healthful stomach is known in this country but by few. It is lamentable that the general taste has been so perverted. Those whose judgment of what wine should be is founded upon the general run of port for the last forty years in this country, are not in the situation of judging what is really intended by wine. Who would think of valuing the malt liquors of this country in proportion as their composition was deteriorated from the pure malt and hop, in proportion as gin, coculus indicus, or tobacco, imparted to them a strength and flavour not derived from the corn which is their basis; yet such is the too general taste for wine indulged in by the bulk of the community? The man of taste, on the contrary, whose stomach is not a "burning fiery furnace," who knows how to enjoy wine of delicacy, perfume, and aroma; who finds in the juice of the grape alone those virtues which a proper and rational participation in the benevolent gifts of Providence enables him to discriminate, will feel the truth of what has been laid down here, and acknowledge its justice. "Claret for boys, port for men, brandy for heroes," said Johnson, whose coarseness was not among his virtues. "Burgundy or claret for gentlemen, port for carters[1], and brandy for savages," would have been a more just apophthegm.

[1] It is not to be imagined the author supposes there is no good port wine; but only that a very large proportion of what is so called is not worthy to be called wine, from not having the true vinous properties, and being spirituous enough for stomachs of caoutchouc.

APPENDIX.

APPENDIX.

No. I.

Distillation was a process unknown to the ancients, and though practised by chemists in Europe, it is probable, from 1150, or about the twelfth century, it did not, until the beginning of the eighteenth, become a general art. We are indebted to the Arabs for the invention of distillation, about the year 900.

Curious distillation in England is inferior both in the mode of the operation, and the excellence of the product, to that of France. Some of the French apparatus is exceedingly complex and expensive, and each kind has a specific application. The excellence of French brandy of the first quality need not be dwelt upon here. In 1639 the art was well established in France. Since 1789 the increase in quality has kept pace with a great improvement in that year. Wine from the grape is the subject of general distillation, although alcohol is produced from numerous other substances. Of wine, 5,229,880 hectolitres are distilled, and give 55,497 hectolitres of spirit, in strength nineteen degrees of Cartier's *hydrometer;* 169,807 at twenty degrees; 343 at twenty-one; 353,883 at twenty-two; and 172,415 at thirty-three. In pure alcohol the whole amount is 469,817 hectolitres, 36 litres, according to M. Gay Lussac. The principal departments where distillation is carried on are those of Aude, Herault, Gard, Gers, Charente, and Charente Inférieure. Then come the Loire and Cher, Gironde, Lot et Garonne, Var, Loire Inférieure, Dordogne, Deux Sevres, Bouches du Rhône, and Landes.

The murks, however well pressed, always contain a portion of undecomposed sugar, besides being impregnated with the wine

in the vat, whether red or white. These are fermented anew and distilled, and the product is called brandy of the murk. The produce is about 37,288·07 hectolitres of pure alcohol, from 70,015 hectolitres of brandy. Cider and perry, corn, potatoes, prunes, cherries, the residue of breweries, furnish together 93,457 hectolitres more of brandy of nineteen degrees of strength. In all, 915,417 hectolitres of brandy, yielding 553,086·27 of pure alcohol. Common distillation was formerly effected in France by an apparatus that made small quantities of spirit at a time, of a very faulty construction. The more modern apparatus of every kind is improved, so as to work well, and give French spirit, let the substance distilled be what it may, a very great advantage over our own, where the process of distillation is in the hands of the excise, and the distiller is not permitted to make a liquor which can be drunk [1].

In large stills the head is of copper, but in small ones of tin. In the ancient still, the head was made with a neck, to retain the descending steam, and carry it into the beak of the head; but at present this is omitted, as being of no real service, because a free passage is allowed to the spirituous part, which is not condensed until the vapour has passed out of the vessel. The worm is of copper in the large apparatus, with as many spiral turns as possible, its diameter being nicely adjusted to the condensation demanded. It is kept cool by fresh water continually introduced into the vessel which contains it. The utmost care is taken that the fire be not too high. In fact, this is considered one of the operations in distillation requiring most experience, and to this end the masonry of the furnace is adapted with great care, so that the heat shall be distributed as equally as possible; the fire being concentrated against the bottom of the still. The chimney is frequently provided with a valve, to enlarge or con-

[1] Government will not allow the distiller in England to distil a wash that will produce less than nineteen per cent. of spirit, which of course cannot be drank. Although a duty of ten and sixpence a gallon is levied upon the spirit in its pure state, the distiller must dispose of it to a rectifier, who adulterates it with juniper, spirit of turpentine, and similar trash, and sells it diluted as *gin*, or, spoiling it with spirit of nitre or prunes, calls it brandy. By this means England has no pure distilled spirit from the grain, like Scotch or Irish whisky. Such is ill-managed taxation, which sacrifices the end and usefulness of a thing to the extortion of a revenue by increased injury to the stomachs of consumers.

tract at pleasure, and thus equallize the current of air, which keeps the fire in activity, according to the state of the atmosphere. The greatest improvement in the chimneys is considered to be one long known, but not brought into general use until Count Chaptal set the example. It consists, instead of the straight funnel of the common chimney, in the introduction of a spiral flue, which winds several times round the still two-thirds of its height, and thus makes the flame which, in the common method, is lost, to the last possible moment available for the work. Care must be taken, however, that these spirals be not carried above the usual level of the liquor in the still, lest the metal be destroyed by the flame.

The marine bath is used for delicate liquors, that cannot bear the direct action of the fire without being tainted or altered. A still, in this case, is always made of the purest tin, and placed within the larger, which last is filled with water. The first is carefully isolated from the sides and bottom of the external vessel, and in consequence its contents are not exposed to a greater heat than that of boiling water. These vessels are luted with care. The substances employed are quenched lime, well mingled into a soft paste with whites of eggs; the only defect of this luting is, that it dries too quickly if the whites are not beaten up with a little water prior to mixing and tempering the lime with them. Lime tempered with curdled milk or bullock's blood, or new wood ashes and bullock's blood, are used. Chalk or lime tempered with boiled linseed oil and litharge, formerly adopted, is now very rarely applied. Lime kneaded with whites of eggs or fresh cheese is considered the best luting of all others.

The main object of distillation with the French is to disengage the spirit speedily, with as much purity as possible, together with the aromatic principle belonging to the substance distilled, where any such may be. It is carefully seen that the liquid remain uniformly at the proper temperature. The still is filled three parts full of wine, and the vessel being luted and secured, and cold water let in round the worm, the fire is raised until the wine is in a state of ebullition. The air within the apparatus now becomes violently dilated, and escapes by the inferior part of the worm, or through the joints, and is speedily followed by

the condensing steam, which begins first to cover in drops the head of the still, and run back into it, until the head has acquired a degree of heat from the contact sufficient to prevent the condensation. Cold water is then thrown upon the head, and the condensation renewed until no more takes place within the still, but the constantly ascending vapour drives all into the worm, where it condenses in the same manner as the first ascending vapours did, against the head of the still while it was yet cool. The cold water round the worm is continually renewed. If this is not done, or if, by any accident, the surrounding temperature become too elevated, though the vapour may not be of sufficient strength to burst the apparatus, the aroma and fine taste of the liquid distilled are injured or entirely destroyed. Wines which most abound in spirit naturally boil quickest, and the largest quantity of fuel is required for the poorest wines. The brandy which is first given out from the still is weak, and not well flavoured; it is always flung back into the vessel. This is speedily followed by the purest product, which is called *eau de vie première*, to distinguish it from that which is given out subsequently. The excellence and strength of the *première* depend naturally upon the quality and richness of the wine and the management of the fire under the still. As the distillation proceeds, the brandy given out becomes weaker, so as at last not to exceed the strength of ten or twelve degrees. When the spirit nearly ceases to be what is called *preuve de Hollande*, from eighteen to nineteen degrees, or *preuve de huile*, from nineteen to twenty-two degrees of the hydrometer (so called, because on letting a drop of oil fall from a small height into the brandy, it sinks to the bottom), they put aside the *eau de vie première*, or first brandy, and this operation is styled *couper à la serpente*, literally, "to put a stop to the worm." This first brandy is supposed to contain a considerable quantity of an essential oil from the wine, which imparts to it an agreeable bouquet, not to be met with in that which succeeds it, being among the substances first volatilized in the operation. This taste or bouquet is lost in the brandy which comes to England, denominated Cognac, owing to the prejudice indulged here in behalf of particular flavours, to obtain which, in the use of burnt sugar, all its traces are destroyed. Still *eau de vie première* is the only kind

exported, because the manufacturer finds it more advantageous to redistil the other and inferior products into a stronger spirit, or, as it is called, spirit of *trois-six*, as it saves expense both in casks and transport. In distilling common and poor wines, it is not customary *pour couper à la serpente*, or to put aside the first spirit. That in the still is generally worked out, and then converted by redistillation into spirit of *trois-six*, from the state called *petites eaux de vie*, or second products. Brandy beyond *preuve de huile* is called *eau de vie double*, up to twenty-eight degrees. Brandy is, however, not generally made quite up to twenty-two degrees of strength, because the duties are nearly doubled upon all above that scale. The best cognac is $21\frac{3}{4}$. Spirit of wine is measured in strength in the same manner as brandy, but the mode of expression is different. Thus, spirit of five-sixths requires one part of water to reduce it to eighteen degrees, and is therefore called of the strength of twenty-two. Alcohol of three-sixths requires three-sixths, or one half water, and is in general about thirty-three degrees of strength. The last is the only spirit of wine exported.

The mode in which the strength of spirit is calculated is always regulated by the temperature of the product from the worm, for the temperature and strength bear a regular proportion. If it be more than ten degrees of Reaumur, when taken immediately from the still, it is found proper, in stating exactly its degree of strength, to calculate for every five degrees of the thermometer one less of Cartier's hydrometer.

So strongly marked is the spirit with the taste of the wine from which it is distilled, that persons of experience can always easily tell from what wine district it comes, and from what species of grape. The brandy distilled from the grape, it is needless to say, after this, is easily discriminated from that produced by any other substance. From the still it is apt to contract two bad qualities, the one called in France the *goût de feu*, or taste of the still. This, time generally cures; the other an empyreumatic taste, caused by a minute portion of the copper of the still becoming decomposed, and, by being burned, imparting a bad taste to the brandy, which some assert to be poisonous.

The preservation of the aroma of any liquor may be secured

or the aroma diminished at pleasure, by taking the spirit as low in strength as will answer the end proposed, keeping up the fire to make the odour or savour ascend rapidly. On the other hand, when it is necessary to get rid of any particular taste, the distillation should be carried to the highest degree. Aromatic liquors lose much of their peculiar flavour by re-distilling. The manufacturers of brandy from inferior materials are so aware of this, that they make their products of the highest proof, and adding a third of the quantity of genuine brandy of the strongest character, delude the unwary by its resemblance to the real quality. If the fire be kept too high, the product is made feeble, from the too rapid ascension of the vapour, if too low, its action may entirely cease. An exact and skilful regulation of the fire alone ensures a good quantity of the *eau de vie première*. Liquids that deposit are agitated to prevent the burning of the deposition, until they are in a state of ebullition. Very solid substances are suspended in the still in cloth bags when the marine bath is not used, and danger of burning is apprehended. By due care in redistilling, the worst brandy from the murk is rendered potable. Fine liquors and perfumes are rectified in alembics of glass, with the greatest care and delicacy of treatment. The range of French distillation is very widely extended to all roots, vegetables, and fruits, that abound in saccharine matter. The fruits require only to be perfectly mashed, water in a proper proportion poured upon them, and then set to ferment, with or without the addition of leaven, as the case may be. The product is a liquor possessing the flavour of the particular fruit, and more or less rich according to the quality and careful treatment bestowed upon it. Some of the kernels, particularly that of the plum, give out so much prussic acid on distillation, that the product must be carefully diluted. It is best for security in all cases to separate the stones from the fruit before fermentation, and to distil them separately, or put them aside altogether, to avoid hazard by those unaccustomed to their distillation. In France a considerable portion of agricultural produce, which is of little use for any other purpose, is devoted to making brandy of inferior quality, which may be applied to numerous purposes of domestic economy. The sediment of wines from garden fruits, honey, molasses from

the best sugar, corn, potatoes (of which latter the product is very great), and similar substances, are all distilled in France, and the spirit is a source of profit to the agriculturist, from which in England he is debarred by the Excise. The coarseness or ill-flavour of the brandy is much reduced by judicious treatment and by rectification.

All spirit is ascertained to be more or less alcoholic by its specific gravity, and this is the criterion which the French apply as least liable to err, for ascertaining most easily the quantity of spirit in a mixture of spirit and water. Spirit of *trois-six* is in proportion to water as eight hundred and forty to a thousand, so that a cube of water, or a litre weighing a thousand *grammes* of the same quantity of spirit, would weigh but eight hundred and forty. This litre of a thousand grammes forms a standard by which to try the strength of every mixture of spirit. It suffices to multiply a thousand, the centimetre cubes in a litre of water, by the difference between that and the specific gravity of the liquor to be tried, and to divide the product by the difference between the specific gravity of a litre of pure spirit, as a point of comparison, with that of a litre of water. A table of the specific gravities of brandy is kept for this purpose, graduated by the hydrometer.

The *titre*, the quality or proper title of strength of the brandy, is established by the hydrometer. But as a variation of temperature of Reaumur, varying five degrees, changes the instrument of Cartier one degree more or less, the titre of the brandy is always established at a temperature of ten degrees of Reaumur, and from this temperature the instrument is graduated on the scale. Thus there is a fairness in the strength of the spirit proclaimed to the purchaser, who might else be a loser, as well as the seller, from differences in the volume, and the consequent erroneous analysis.

Brandy must have age to lose the new taste from the still, yet if kept in a warm place in wood, it will lose a portion of its spirit by evaporation. The wood too gives an amber-colour to the spirit, and impairs its clearness, which should be transparent as water. In order to remedy this, the brandy is frequently injured in quality by attempting to give it limpidity, though in

that exported to England, any tint it has received in the still or wood is of no importance.

The heavy wines of the south, and such as are abundant in tartar, give very middling brandy ; that from acid or pricked wines is deeply tainted. Wines abounding in saccharine matter, which has decomposed entirely during the insensible fermentation, give the best spirit. These last wines are not distilled new, as they are apt to burn, and give out less alcohol. White wines give a softer brandy than red. All brandy should be of the right colour, and that of cognac should not conceal an ill-coloured article when it is prepared for exportation. Brandy is reduced, when necessary, by an admixture of water, which the French call *mouillage*. Heat is given out in this operation. The brandy must be agitated, and the quantity nicely adjusted to reduce the strength to the required degree. For this purpose, the quantity of strength to be reduced is multiplied by the number of degrees it carries on the hydrometer. The product is divided by the number of degrees of which it is desired the brandy should consist when lowered. Subtracting from this sum the quantity of spirit employed, the water to be added is found. Suppose 25 litres of spirit, at 32 degrees, are to be lowered to 18 degrees, it is found that 800 is the product of 25 multiplied by 32 ; this divided by 18, gives 44 litres 44 centilitres. It only remains, to subtract the litres of spirit employed, and the result is 19·44 the quantity of water required. Pure spirit of wine is generally sold by the velte.

Thus every thing in the conduct of distillation in France is regulated by due attention to science, which accounts for the superiority of that country in this and several similar branches of the useful arts.

This statement respecting distillation will serve without the particulars of the process in other countries, where it is managed in an inferior manner. Spanish brandy ranks next in quality to that of France.

No. II.

WINES OF THE FIRST CLASS.

FRANCE, SPAIN, HUNGARY, GERMANY, SICILY, NAPLES, CAPE OF GOOD HOPE.

Wines.	Country.	Place.	Character.
Romanée Conti	France	Côte d'Or	The first and most delicate red wines in the world, full of rich perfume, of exquisite bouquet and fine purple colour, light, yet with body and spirit sufficient to render them pleasant and healthful in use.
Chambertin	do.	do.	
Richebourg	do.	do.	
Clos Vougeot	do.	do.	
Romanée St. Vivant	do.	do.	
La Tache	do.	do.	
St. Georges	do.	do.	
Corton	do.	do.	
First growths of Prémaux	do.	do.	Burgundies, closely resembling the above growths in aroma, and all their other qualities.
Musigny	do.	do.	
Clos du Tart	do.	do.	
St. Jean	do.	do.	
Perrière	do.	do.	
Veroilles	do.	do.	
Morgeot	do.	do.	
Mont Rachet	do.	do.	White highly esteemed.
Lafitte	do.	Gironde.	Fine colour and perfume, light, less warm than Burgundy, with a taste of the violet, and rich purple hue.
Latour	do.	do.	
Château Margaux	do.	do.	
Haut Brion	do.	do.	
Beaume	do.	La Drôme	Wines of the Rhône, darker in colour than the preceding. Red Hermitage the most noted of these, of good body, and a fine flavour of the raspberry.
Muret	do.	do.	
Bessas, Burges, Landes	do.	do.	
Méal and Gréfieux	do.	do.	
Racoule, Guionière	do.	do.	
Sillery	do.	Marne	White, still, dry; of an amber colour; generally iced for drinking.
Ay	do.	do.	Fine effervescing wine, bright in colour, slightly frothing.
Mareuil	do.	do.	The best of the white wines of Champagne, being all of the first quality, but differing a little in colour and effervescence.
Hautvilliers	do.	do.	
Pierry	do.	do.	
Dizy	do.	do.	
Epernay "Closet"	do.	do.	
St. Bris	do.	Gironde	Fine white wines of excellent quality, lightish brown in colour, aroma most agreeable, and some of rather sweet taste.
Carbonnieux	do.	do.	
Pontac	do.	do.	
Sauterne	do.	do.	
Barsac	do.	do.	
Preignac and Beaumes	do.	do.	Description resembles the preceding.
Château Grillet	do.	La Loire	
Hermitage	do.	Rhône	Full of body, spirit, and perfume. The white is the finest of all white wines.

(*continued*)

Wines.	Country.	Place.	Character.
Rivesaltes	France	Pyrénées Orientales	A rich muscadine.
Colmar, Olwiller, Kaiserberg	do.	Haut Rhin	Straw wines, rich and luscious.
Kientzheim, Ammerschwir	do.	do.	Do.
Hermitage de Paille	do.	Rhône	Do.
Amontillado Sherry	Spain	Andalusia	A dry, delicate wine.
Schloss Johannisberger	Germany	The Rhine	Do.
Lacryma Christi	Naples	Naples	A fine, luscious, sweet red wine.
Syracuse	Sicily	Syracuse	Remarkably fine red muscat.
Tokay Essence, and its first growths, called Tarczal, Szeghi, Zadany, Tolesva, also Erdo-Benye, Zambor, Tallya, Mada	Hungary	County of Zemplin.	Thick rich wines, known as Tokay, also Tokay-ausbruch.
Cotnar	Moldavia	Cotnar	Very spirituous, by some preferred to Tokay. Greenish colour.
The Commandery	Cyprus	Com. D.	Thick, rich, and luscious.
Constantia	Africa	Cape of Good Hope.	Luscious; two kinds.
Lagrimas	Spain	Malaga	Thick and luscious.

The dry wines of the first class are all of French growth, except two. Dry wines of the first class will bear no mixture, except with their own growths; are too delicate to be adulterated without instant detection; are the pure offspring of the grape, and rank nearest to perfection of any known wines of ancient or modern times.

WINES OF THE SECOND CLASS.—FRENCH.

Wines.	Place.	Character.
Verzy, Verzenay, Mailly, St. Basle, Bouzy, St. Thierry	Marne	Red wines of Champagne.
Vosne, Nuits, Chambolle, Volnay, Pomard, Beaune, Morey, Savigny, Meursalt	Côte d'Or	Excellent red Burgundies, very little inferior to first growths.
Olivotes, Pitoy, Perrière, Préaux	Yonne	Good wines.
Chainètte, Migrenne	do.	Good wines.
Moulin à Vent, Torins, Chénas	Saone et Loire, Rhône	Red.
Hermitage, second growths	Rhône	Red.
Côte Rôtie	do.	Red.
Rozan, Gorze, Léoville, Larose, Branne-Mouton, Pichon-Longueville, Calon	Gironde	Red.

(*continued*)

Wines.	Place.	Character.
Côteau Brûlé	Vaucluse	Red.
Jurançon, Gan.	Basses Pyrénées	Red.
Roussillon, Bagnols, Cosperon, Collioure, Torénmila, Terrats, Masdeu	Pyrénées Orientales	Red.
Cramant, Avize, Oger, Menil	Marne	White Champagne wines, of good quality.
La Perrière, Combotte, Goutte d'Or, Genevrière, Charmes et Meursalt	Côte d'Or	White Burgundies, of high repute in France.
Guebwillers, Turkeim, Wolxheim, Molsheim, and Rangen, in Belfont	Haut Rhin Bas Rhin	Dry, white, and *vins de paille*, of good repute.
Arbois, Pupillin, Château Chalons	Jura	Good wine, *mousseux* and still.
Coudrieu	Rhône	A white wine, which keeps long, of fine *sève* and perfume.
Langon, Cerons, Podensac	Gironde	White wines, capable of endurance.
Montbazillac, Tcaulet, Raulis, Suma, Sancé	Dordogne	Good white wines of the country.
Buzet, Amazon, Vianne	Lot et Garonne	Generous white wines, of good body.
St. Peray, St. Jean	Ardèche	Delicate *mousseux* and *non mousseux*, of agreeable flavour.
Jurançon	Basses Pyrénées	White, with an agreeable perfumeof the truffle.
Frontignan and Lunel Mazet	Herault	Sweet, rich, and luscious; white.
Bagnols, Collioure, Rodez	Pyrénées Orientales	Red, styled *de Grenache*, rich and sweet.
Maccabeo of Salces	do.	Sweet, *vins de liqueur*.

THIRD CLASS.—FRENCH.

Wines.	Place.	Character.
Hautvilliers, Mareuil, Dizy, Pierry, Epernay, Taisy, Ludes, Chigny, Villers-Allerand, Cumiéres	Marne	Red Champagne wines of the second quality; light and agrceable.
Ricey, Avirey, Bagneux la Fosse	Aube	Resembling the preceding.
Gevrey, Chassagne, Aloxe	Côte d'Or	Good Burgundies of the third quality.
Savigny sous Beaune, Blagny, Santenay, Chenôve		
Clarion, Bonvin	Yonne	Ditto.
Fleury, Romanéche		
Chapelle Guinchay	Saône et Loire	Ditto.
Chantergues, Montjuset	Puy de Dôme	Not wines of note; red.

(*continued*)

Wines.	Place.	Character.
Crozes, Mercurol, Gervant	Drôme	Resembling red Hermitage; a little less full and fine, might be called Hermitage of the third quality.
Seyssuel, Revantin	Isère	Red wines, very middling of the class.
Verinay	Rhône	Resembling Côte Rôtie.
Pouillac, Margaux, Pessac, St. Estephe, St. Julien, Castelnau de Mèdoc, Cantenac, Talence, Merignac, Canon	Gironde	Pouillac, St. Estephe, good light red wines; Castelnau mediocre; the other growths agreeable.
Farcies, Terrasse, Campreal	Dordogne	Resembling St. Emilion; keeping well.
Cape Breton, Soustons	Landes	Red; light coloured, with a harsh taste.
Chuzclan, Tavel, St. Genies, Virac. Ledenon, St. Laurent des Arbres	Gard	Red wines grown on the banks of the Rhône; will not keep good more than six years.
Chateauneuf	Vaucluse	Good red wines; keep well.
Riceys	Aube	Champagne; light and agreeable, white.
Rougeot de Meursalt	Côte d'Or	Tolerable wine; not exported.
Vaumorillon, Grises, Valmure, Grenouille, Vaudesir, Bourgereau, Mont de Mileu et Chablis	Yonne	In considerable esteem in Paris as wines of the table. They are all white.
Pouilly and Fuissé	Saône et Loire	Much the same as the preceding.
Etoile, Quintignil.....	Jura	White.
Pujols, Ilats, Landiras, Virelade, St. Croix du Mont, Loupiac.....	Gironde	Do. of middling quality.
St. Michel sous Condrieu.....	Loire	Ditto; consumed in the country.
Frontignan and Lunel	Herault	Second growths of those famous and rich white wines.
Vins de Picardan of Marseillan and Pommerois. Vins de Calabria, de Malaga.....	Ditto	Rich luscious sweet wines, prepared in the department of Herault, and very little exported; also muscadines.
Roquevaire, Cassis, Ciotat. Vins Cuits	Bouches du Rhône	Rich sweet wines, boiled wines, and malmseys, of good quality.

The above are the three first classes of French wines, including all which are commonly exported; there are, according to the best authorities, six classes of red, seven of white, and

four of *vins de liqueur*. In these (exclusive of the list above comprising the choicest kinds) there are two hundred and forty-three white, nine *vins de liqueur*, and four hundred and sixty-three red wines, commencing with the fourth class. The wines of Champagne descend six degrees in class and quality, hence the importance of ascertaining the proper class by those who purchase them. It would occupy a vast deal of room to give the names of all the growths and vineyards. The author has a list of sixteen hundred in his possession, and they do not comprise the whole by a considerable number.

(*Madame Gervais*, p. 35.)

Madame Gervais was a proprietor of considerable vineyards near Montpellier. She embraced the idea, by no means a new one, that what is termed the vinous fermentation is a mild natural distillation. She proceeded to obtain an apparatus that she imagined would operate so as to return into the vessel the spirit and flavour that was evolved in fermentation, and let out the carbonic gas, which might burst the working-tun. Her apparatus consisted of a vessel, resembling the head of the ancient still, constructed of such form as to be capable of being placed securely in the back or vat in which the process of fermentation was carried on; the back or vat was air-tight, with a hole in the top, communicating with that part of the apparatus called the cone or condensor. This cone was surrounded by a cylinder, or reservoir, to be filled with cold water, so that the alcoholic vapour or steam, evolved during the process, might be condensed as it came in contact with the cold interior surface of the cone; and, being thereby converted into liquid, trickle down the inside of the condensor, and through a long pipe be returned into the fermenting liquor. By the application of this apparatus, a considerable portion of alcohol, which had been suffered to escape in the form of vapour, along with the non-condensable gases, was to be condensed and returned into the liquor; and the non-condensable gases carried off by a pipe, which, proceeding from the interior lower part of the cone, and running up the inside of the cylinder in the cold water, passed out through the side, and the end being immersed some depth below the surface of water contained in a separate vessel, permitted the gases to escape, but still under a certain degree of pressure,

the object of which was to confine the alcoholic steam and gas within the cone, and allow them a sufficient time to cool and condense. The apparatus being applied to ferment the *must* of grapes was also said to procure an increase of quantity. This effect, however, has not been confirmed by the makers of wine in France, who have very little opinion of the efficacy of this machine.

TABLE OF DEPARTMENTAL PRODUCE.

The following is the departmental product of the French vineyards, the number of hectares of vines, the product in hectolitres per hectare, the value of the wines for each department, and the hectolitres distilled into brandy, being the first statement of the same nature from authentic data published in this country. The whole are from the actual returns.

Departments.	Hectares of Vines.	Hectolitres par Hectare.	Total Hectolitres of Wine.	Value in Francs.	Hectolitres of Wine Distilled.	Hectolitres of Brandy.	Strength. by Cartier.
Ain	16,418	22·78$\frac{9}{16}$	373,828	5,617,120			
Aisne	8,494	31·98$\frac{3}{8}$	271,717	6,211,090			
Allier	15,243	18·95$\frac{1}{15}$	288,866	5,113,350			
Alpes, Basses.	3,600	28·00	99,800	1,596,800			
Alpes, Hautes	5,850	18·61$\frac{3}{5}$	108,900	1,633,500			
Ardèche	14,929	15·05$\frac{7}{7}$	224,322	3,816,190			
Ardennes	1,960	28·33$\frac{2}{3}$	55,540	1,110,800			
Ariége	8,843	12·15$\frac{1}{8}$	117,453	1,761,795			
Aube	22,586	25·36$\frac{1}{2}$	572,870	9,858,232			
Aude	36,064	16·68$\frac{2}{3}$	601,775	6,326,136	191,000	27,286	33°
Aveyron	13,714	21·19	291,435	4,260,996			
Bouches du Rhône	27,338	21·59	590,244	8,803,302	45,000	9,000	20°
Calvados	5	20·00	100	1,500			
Cantal	400	10·80	4,320	51,840			
Charente	136,124	13·04$\frac{1}{2}$	1,826,092	17,008,844	1,300,413	185,774	22°
Charente Inférieure	85,107	21·05$\frac{1}{8}$	1,791,610	18,986,060	1,095,927	148,329	22°
Cher.....	13,054	25·61$\frac{7}{12}$	332,832	6,666,356	1,260	210	20°
Corrèze	15,804	18·14	286,682	4,012,148			
Corse	10,485	31·12	310,730	4,660,950			
Côte d'Or....	25,351	22 81	578,252	15,473,530			
Côtes du Nord							
Creuse							
Dordogne....	64,316	10·27	660,704	11,913,854	50,000	7,600	19°
Doubs	6,625	21·13	139,978	2,566,812			
Drôme	28,212	18·00	507,908	9,918,152		40	19°
Eure.....	1,780	33·28$\frac{1}{8}$	59.240	1,256,096			
Eure et Loire	5,496	20·00	109,920	2,198,400			
Finistère							

(*continued*)

Departments.	Hectares of Vines.	Hectolitres par Hectare.	Total Hectolitres of Wine.	Value in Francs.	Hectolitres of Wine distilled.	Hectolitres of Brandy.	Strength by Cartier.
Gard	51,198	20·34⅔	1,041,651	10,949,833	308,200	{ 29,616 20,000	20° 33°
Garonne Haute	47,902	9·76	467,723	6,248,122	3,000	462	20°
Gers	73,785	14·83	1,094,612	10,309,462	300,100	83,333	20°
Gironde	137,002	18·72⅔	2,805,476	49,177,454	120,000	24,000	19°
Hérault	91,941	18·63⅑	1,713,600	17,797,407	1,063,600	125,129	33°
	h. a.						
Ille et Vilaine	93,73	29·65¼	2,757	33,084			
Indre	16,625	17·00	282,560	3,921,510			
Indre et Loire	28,310	23·00½	665,224	10,993,136	4,000	571	22°
Isère	10,665	34·58⅖	368,861	6,106,079			
Jura	16,487	18·70	308,297	5,025,979			
Landes.....	20,052	25½	511,209	6,209,000	40,000	5,714	19°
Loir et Cher..	22,769	28·43⅐	647,360	8,062,120	160,000	26,666	20°
Loir	11,254	24·54	276,162	5,517,430			
Loire Haute..	4,445	20	88,900	1,264,140			
Loire Inférieure	28,643	28·65⅔	812,794	7,219,755	60,000	8,571	22°
Loiret	28,591	24·25	693,304	11,420,230			
Lot..	49,759	11·39¼	566,859	9,566,112	3,000	500	19°
Lot et Garonne	38,483	16·43	579,187	10.972,069	93,250	17,643	19°
Lozère	995	15	14.925	268,650			
Maine et Loire	26,401	18·69¼	493,452	8,239,495	2,400	343	21°
Manche							
Marne	19,066	22·16	422,487	11.235,397			
Marne Haute	12,183	41·82	509,790	7,292,880			
Mayenne	681	13½	9,494	151,904			
Meurthe.....	13,592	50.64⅝	688,358	9,430,296			
Meuse	12,250	44·61 1/12	546,523	9,093,656			
Morbihan....	221	26⅔	5,876	76,388			
Moselle	5,254	49·63 1/25	260,759	4,693,662			
Nièvre	8,054	20·07¼	161,664	3,083,816			
Nord							
Oise	4,369	24⅕	108,316	3,449,566			
Orne							
Pas de Calais							
Puy de Dôme	21,436	16·46 2/21	352,859	7,335,760			
Pyrénées, Basses	20,483	16·26 7/20	333,330	5,270,433			
Pyrénées, Hautes	14,296	19·45	278,063	3,271,814	30,000	5,500	20°
Pyrénées, Orientales	29,913	11·50	343,968	7,164,612	1,200	250	20°
Rhin, Bas ..	13,087	35·51 8/13	464,807	8,336,526			
Rhin, Haut ..	11,694	29·70½	347,335	4,869,145			
Rhône	18,126	25·26⅔	458,000	10,366,400			
Saône, Haute	10,698	21·72 1/10	232,378	4,338,884			
Saône et Loire	30,708	21·52⅓	660,942	13,027,079			
Sarthe	9.689	15·36 1/16	148,753	2,172,650			
Seine	2,504	39⅓	99,117	1,953,120			
Seine Inférieure							
Seine et Marne	16,517	33¾	557,516	8,462,740			

(*continued*)

Departments.	Hectares of Vines.	Hectolitres par Hectare.	Total Hectolitres of Wine.	Value in Francs.	Hectolitres of Wine distilled.	Hectolitres of Brandy.	Strength by Cartier.
Seine et Oise	16,298	52·13⅝	849,718	14,775,880			
Sèvres, Deux	15,885	16·69Ⅸ	264,236	3,399,262	49.000	7,000	20°
Somme.....	62	11⅐	690	13,800			
Tarn.....	20,631	21·00⅕	433,297	5,411,160			
Tarn et Garonne	23,168	11·40½	264,360	3,035,700	1,625	270	20°
Var	15,895	43·62½	693,443	8,303,780	65,000	12,000	20°
Vaucluse	22,038	16	362,208	6,519,744	15,000	2,500	20°
Vendée.....	13,374	25·19⅔	336,982	3,369,820	11,000	1,350	22°
Vienne.....	21,423	20·67⅕	435,451	4,881,130	16,000	2,288	22°
Vienne Haute	2,351	15·52⅔	36,506	512,922			
Vosges.....	3,116	32·67¼	100,808	1,905,720			
Yonne	33,630	23·39½	886,604	23,639,086			
Totals....	1,736,056	mean 20·27	35,075,689	540,389,298	5,229,880	751,945	
Add Brandy extracted from the Murk						70,015	
Total Brandy from the Vine						821,960	

An attempt was made some time ago to value the French wines according to their qualities, by M. Chaptal. Without being founded on any positive data, these calculations carried the total value to 718,941,675 francs. The statement was an exaggerated one. The totals of the Cadastre, and more minute inquiries, have established that the foregoing table comes as near as possible to the truth. The calculations of M. Chaptal thus made, it is, therefore, a waste of space to repeat here, having given the value of the wines in each separate department, with a total annually of 540,389,298 francs, or 22,516,220*l.* 15*s.* sterling.

The mean exportation of all kinds of wine may be rated at something above 1,155,074 hectolitres annually, of which England takes only 14,367. These added to the wines consumed in distillation, make about 6,384,953 hectolitres, leaving for wines drank in France, spoiled, manufactured into vinegar, and the like, 28,690,736. The consumption of wine in all modes, therefore, reckoning the French population at 31,000,000, cannot be any thing like a hectolitre per head per annum.

The value of the wines and spirits exported in 1823 was

76,639,026 francs; it had increased in 1832, in quantity if not in value to 28,761,600 imperial gallons. The brandy exported is about 335,697·64 hectolitres per annum.

To recapitulate, and add the other spirituous drinks in France, except *liqueurs*.

	Hectolitres.	Value Francs.
The brandy, averaging 19°, distilled from other substances than the grape	93,457	14,018,550[1]
Cider and Perry	8,868,738	67,178,956
Beer	2,300,689	1,335,236
Wine	35,075,689	540,389,298
Total of all kinds	46,338,573	622,922,040

It has been estimated at about eighteen gallons, and the annual value of eight shillings per head, on 33,000,000 population. The following has also been given as the produce of France and its disposal, the produce supposed to be 924,000,000 gallons.

Consumed by proprietors not paying duty	198,000,000
Manufactured into brandy	141,000,000
Loss and waste with grower	91,344,000
Ditto in conveyance and with dealers	44,000,000
Exported	24,530,000
Made into vinegar	11,000,000
Duty on consumption	308,000,000
Fraudulent consumption	105,466,000
or 42,000,000 hectolitres	

The inhabitants of the towns consume 8,670,293 hectolitres, those of the country 19,122,707 hectolitres.

If to 28,690,736 hectolitres of wine are added 12,000,000 more for beer, cider, and other liquids of a similar kind consumed, there cannot then be reckoned, including waste, as much as $1\frac{1}{4}$ hectolitre of consumption per head, for the population of France.

The prices of the wines of France it would be of little use to give for the current year, as they vary so much with the season. The prices approximating as nearly as possible to mean prices are given in the chapters descriptive of the wines, and need not be repeated tabularly.

[1] This brandy is perhaps valued too high at 150 francs the hectolitre.

The entire imports of French wine into Great Britain for the last hundred and thirty-two years were as follow; the home consumption is of course less, as a part was exported.

	Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.
1700	664	2	26	1745	140	3	31	1790	1,101	2	52
1701	2,051	3	62	1746	86	2	32	1791	1,137	0	43
1702	1,624	0	14	1747	206	1	41	1792	1,617	1	9
1703	139	3	46	1748	414	2	40	1793	1,590	0	11
1704	198	3	7	1749	464	2	33	1794	757	3	25
1705	168	0	26	1750	418	1	59	1795	1,347	2	49
1706	158	3	3	1751	461	1	28	1796	1,809	3	38
1707	103	2	23	1752	407	3	8	1797	850	0	2
1708	167	1	23	1753	623	2	10	1798	1,577	0	49
1709	238	1	51	1754	559	1	11	1799	1,662	0	61
1710	113	3	60	1755	650	1	34	1800	2,078	1	15
1711	532	1	2	1756	554	3	44	1801	2,506	3	36
1712	116	0	39	1757	350	3	24	1802	1,236	1	61
1713	2,551	2	26	1758	274	0	55	1803	1,445	0	9
1714	1,198	1	55	1759	338	2	3	1804	1,425	3	0
1715	1,260	2	48	1760	377	2	37	1805	2,593	1	5
1716	1,570	1	49	1761	546	2	16	1806	5,393	1	40
1717	1,396	1	37	1762	303	3	49	1807	5,438	1	33
1718	1,798	1	42	1763	441	2	61	1808	7,838	0	58
1719	1,766	2	2	1764	446	1	7	1809	13,105	0	33
1720	1,366	0	36	1765	540	2	26	1810	4,117	0	52
1721	1,247	1	20	1766	497	3	7	1811	3,441	2	57
1722	1,424	3	16	1767	545	1	59	1812	5,100	1	$7\frac{1}{4}$
1723	1,037	1	8	1768	441	2	39	1813	741	0	15
1724	1,147	3	57	1769	460	2	3	1814	3,902	3	$32\frac{1}{4}$
1725	1,087	3	14	1770	468	2	27	1815	2,116	1	$17\frac{1}{4}$
1726	633	2	41	1771	535	3	20	1816	1,612	0	$46\frac{3}{5}$
1727	1,085	3	1	1772	475	3	17	1817	802	2	$17\frac{3}{5}$
1728	1,105	0	30	1773	494	1	61	1818	1,798	2	6
1729	894	0	51	1774	560	0	52	1819	1,543	1	$39\frac{1}{2}$
1730	636	0	24	1775	497	1	43	1820	1,090	3	$30\frac{1}{4}$
1731	1,007	0	42	1776	434	3	48	1821	1,057	1	$6\frac{2}{20}$
1732	865	2	44	1777	602	1	35	1822	1,193	0	$17\frac{11}{20}$
1733	840	0	17	1778	595	2	3		Imperial Gallons.		
1734	780	1	56	1779	363	1	34	1823	307,326		
1735	667	2	48	1780	376	1	33	1824	249,520		
1736	528	3	4	1781	378	3	38	1825	978,635		
1737	633	2	55	1782	456	3	14	1826	427,801		
1738	471	2	22	1783	370	0	33	1827	353,904		
1739	607	1	61	1784	385	2	46	1828	451,361		
1740	856	2	47	1785	470	1	41	1829	474,375		
1741	165	0	36	1786	475	2	16	1830	408,210		
1742	435	3	59	1787	2,127	3	20	1831	337,093		
1743	310	1	2	1788	1,445	1	45	1832	278,863		
1744	557	1	10	1789	1,114	3	26	1833	228,627		
								1834	438,656		

Legislation alone caused the change in our relations with France, and the rejection of her delicate for coarser wines. For more than a century its influence has been felt, while attempting to exclude the produce of the vineyards of that country from our markets by differential duties. It is not difficult to trace the seeds of this commercial dissonance to the reign of Charles II., during which the French King (acting under the advice and in agreement with the system of his minister Colbert), having imposed some duties upon English goods, the *lex talionis* was applied.

"It was about the same time (1667) that the French and English began mutually to oppress each other's industry, by the like duties and prohibitions, of which the French, however, seem to have set the first example. The spirit of hostility which has subsisted between the two nations ever since, has hitherto hindered them from being moderated on either side."—*Smith's Wealth of Nations.*

Notwithstanding these checks and discouragements to the French trade, our ignorance of Portuguese wines continued to be almost complete, even down to 1688; but the revolution which occurred in that year, by widening our political differences with France, did in its effects force the people of this country to seek elsewhere for their supplies of that beverage which in all ages and in all countries has been so much prized by man.

Prior to that important æra our demand for French wines mounted at times to 20,000 tuns per annum[1]. The war which broke out in 1689 occasioned a stoppage of our supplies from France; and though the peace of 1693 was instantly followed by an increased import of French wines, notwithstanding the action of heavy differential duties; yet the commencement of the Oporto trade may be fixed about this period.

Thus the "Farewell to Wine," published in 1693, runs—

> "Some claret, boy!—Claret, Sir! Lord, there's none!
> Claret, Sir! Why there's not a drop in town;
> But we've the best *red port*.—What's that you call
> Red port?—A wine, Sir, comes from Portugal;
> I'll fetch a pint," &c.

[1] A tun of wine is *two* pipes.

And Prior, who flourished at this time, has frequent allusions to the change in the beverage :—

> "Else (dismal thought) our warlike men
> Might drink thick port."—*Alma—First Canto.*

And again—

> "And in a cottage or a court
> Drink fine champagne, or muddled port."—*Third Canto.*

Again—

> "Or if it be his fate to meet
> With folks who have more wealth than wit,
> He loves cheap port."—*Prior's Chameleon.*

But spite of the poets, legislation and economy prevailed, and we accordingly find Red Port, or some of the other wines of Portugal were introduced ; for it must be borne in mind, that formerly the consumption of Lisbon white wines was very great.

In 1697, 4,774 tuns of Portuguese wines were imported, while only two tuns were brought from France, instead of 14,000, or according to some 20,000 tuns, but nine years before.

The support which the Stuarts received at the court of France, and the intrigues of Louis XIV. in Spain, contributed to make the English government encourage a still closer amity with Portugal. Though the imports of French wines had again risen to 1,800 tuns, the average in 1701 and 1702, when the war was again renewed the supplies diminished, and to complete their exclusion the Methuen treaty was signed in December, 1703.

By that treaty, it was stipulated, that on condition we admitted the wines of Portugal *at one-third less duty* than those of France, Portugal would receive "the woollen cloths and the rest of the woollen manufactures of the Britons till they were prohibited by the laws." Aided by the ten years' war, the effect of the treaty was, that the imports of French wines were reduced to 200 tuns in annual average or thereabouts ; but when the Treaty of Peace and Commerce was signed in 1712, the historian says, that "a day being appointed by the Commons to deliberate on the Treaty of Commerce, very just and weighty objections were made to the 8th and 9th articles, importing that

Great Britain and France should mutually enjoy all the privileges in trading with each other that either granted to the most favoured nation, and that no higher customs should be exacted from the commodities of France than were drawn from the same productions of any other people. The balance of trade having long inclined to the side of France, some duties had been laid on all the productions and manufactures of that kingdom, so as almost to amount to a total prohibition." "Some Member observed, that by the treaty between England and Portugal, the duties charged upon the wines of that country were lower than those laid upon the wines of France; that should they now be reduced to an equality, the difference of freight was so great that the French wines would be found much cheaper; and as they were more agreeable to the taste of the nation in general, there would be no market for the Portuguese wines in England."—*Smollett's continuation of Hume, year* 1713.

No wonder that those interested in the Portuguese trade found the advance of the French imports from 116 tuns in 1712 to 2,551 tuns in 1713 "a very just and weighty objection," especially if taken in connexion with what is stated at page 82 of "Original Documents concerning the injurious effects and impolicy of the Portuguese Royal Company at Oporto," published in London, 1813, "that so late as 1715 the Portuguese were supposed to have been ignorant of the art of preparing wine for exportation:" aye, *twelve years after the treaty forcing them upon Englishmen was signed!*

Influenced at once by hatred of France, disgusted at the treacherous treatment of our allies, by the then existing government, and a desire to be rid of the ministry, Parliament refused to sanction that Treaty of Commerce, and the differential duties were continued in full play. These, in 1726, according to a "Complete View of the British Customs, by Henry Crouch, of the Custom-house, London," consisted of old subsidy, new subsidy, additional duty, cognage, impost, additional impost, French wine, French duty; and though at this distance of time the modes of ascertaining the exact amount to an unpractised person are far from facile, yet the following, it is believed, will be found the sums levied respectively on French and Portuguese wines.

The terms "filled" and "unfilled" were modes of entry. When the merchant took on himself the payment of the duties on the

" actual content," as it is now expressed; that is, on the exact quantity the cask contains; the wines were entered " filled." With a view, however, to save very rigid examinations, an allowance of 10 per cent. was made for leakage on the voyage; and where this satisfied the merchant, he then entered the wines " unfilled."

1726.—DUTIES PER TUN ON WINES.

FRENCH.	Filled.	Unfilled.	PORTUGUESE.	Filled.	Unfilled.
For sale	£48 11 8	£46 6 8	For sale	£20 7 3	£17 13 9
Private use	49 8 10	46 17 4	Private use	21 5 6	18 9 10
Retailers	49 11 10	48 3 7	Retailers	21 17 6	20 9 2

A trifling difference of duty attached at that time to the uses for which, in the entry at the Custom House, it was declared the wines were intended to be applied.

It would be easy to show that drawbacks may exercise either a very partial or prejudicial effect, or both; at this period they were constituted so as eminently to favour Portugal, and injure France.

1726.—DRAWBACKS ON WINE PER TUN.

FRENCH.	Filled.	Unfilled.	PORTUGUESE.	Filled.	Unfilled.
For sale	£21 18 3	£19 18 10	For sale	£16 5 4	£14 0 3
Private use	22 6 5	20 6 0	Private use	16 17 6	14 10 11
Retailers	22 11 9	21 3 6	Retailers	17 5 6	15 17 2

Leaving the actual amount levied should the wines be exported; and in those days neither docks, nor bonded vaults, nor the warehousing system, which created both, were in existence, as follow,

FRENCH.	Filled.	Unfilled.	PORTUGUESE.	Filled.	Unfilled.
For sale	£26 13 5	£26 7 10	For sale	£4 1 11	£3 13 6
Private use	26 17 5	26 11 4	Private use	4 8 0	3 18 11
Retailers	27 0 1	27 0 1	Retailers	4 12 0	4 12 0

Who can fail to see why Portugal at that time supplied us with thousands, while France sent only hundreds of tuns? It may suffice to add an account of the duties levied on French and Portuguese wines, from 1786 inclusive; premising it with this single observation, that while we were patronizing the wines of Portugal by such discriminating duties, the Portuguese were sagacious enough to perceive that more was done than was needful, and actually imposed an export duty. Not only, then, were we taxed to exclude French wines, but so taxed as to contribute liberally to the *Portuguese* exchequer.

DUTIES ON FRENCH AND PORTUGUESE WINES FROM 1786 to 1831 INCLUSIVE, PER IMPERIAL GALLON.

Years.	French.	Portuguese.	Years.	French.	Portuguese.
1786	8 8¾	4 2	1804	13 6½	9 0
1787	6 2½	3 6¾	1805 to	13 8½	9 1½
1788 to	4 6	3 0	1813	19 8½	9 1
1795	7 4¼	4 10¾	1814 to	13 8½	9 1½
1796 to	10 2½	6 9¾	1819	13 9	9 1½
1798 to	10 6½	6 11¼	1825	7 2½	4 9¾
1801	10 2½	6 9¾	1826	7 3	4 10
1802	10 7¼	7 0	1831	5 6	5 6 still existing.
1803	12 5½	8 3			

From the period of our Revolution, then, to 1831, French wines have had no opportunity of competing with those of Portugal in our markets, being burdened by the action of heavy discriminating duties.

But it may be asked, how it happens that though these duties were equalized in 1831, no material increase is yet observable in the Parliamentary or other returns of the quantity consumed?

Among other causes, it is thought that the following have contributed to keep the demand contracted, and also to hinder the official returns, which are often but "false facts," from showing any increase.

1st. The very reduction of the duty, by rendering the French wines then most in use less *recherché* as a luxury, because less costly, would and did make them less valued by their former consumers, the rich and great, while as yet no other class of the community was familiarised either with them or any of the other varieties of French wines, "*respecting many of which, in England, as little is known as of Shiraz.*"

2nd. The alarm which the cholera produced tended materially to diminish the call for French wines, while, by way of compensation, it fell on the brandies of France.

3rd. In importance may be ranked the frequent changes of duty, oftener affecting French than Portuguese wines, in addition to their more onerous character, especially that of 1813, amounting almost to prohibition.

Besides, time must be allowed for inquiry as to the most suitable wines for preparation to suit our markets, as also to prepare

them after the choice is made, for only *old* wines are suited to England. Security is an inherent principle in the *right* application of capital; and good wines for our market can only be had after long preparation.

WINES OF THE GIRONDE,

WITH AVERAGE PRICES SINCE THE PEACE, AS SOLD NEW BY THE GROWERS.

In three or four years the increase for keep and shipping is 45 additional.

Medoc.	Good Years.	Middling.	Bad.	Tuns.
	Frs.	Frs.	Frs.	
Lafitte, Latour, Chateau Margot	3,000	1,750	400	300
Rausan, Durfort, Lascombe, Leoville, Branne Mouton, Larose	2,700	1,400	350	620
Gorce, Kirwan, Chateau d'Isson, Malescot, Brown, Ducru, Tichon, Cabarrus, Cosse ..	2,400	1,200	325	650
Calon, Giscours, Toujet, Loyac, Lacolonie, Lorlagune, Daleure, Dubignon, Ferriere, Durand, Palmer, Desmirail, St. Pierre, Duluc, Becheville, Mandari, Montrose, Daux..	1,800	1,000		750
Poutet Canet, Bedout, Ducasse, Grand Pui, Turine, Darmaillac, Montpelon, Bataily, Duliard, Croiset, Carnet, Coutanceau, Pop, Pergenson, Tronquoy, Morin, Lebose.....	1,500	900	300	1,100
Of good St. Estephe, Pouillac, Soussan, Margaux, Cantenac	1,000	600	280	6,000
The same, lower quantities.....	600	400	250	20,000
Common of the same, and Lower Médoc	450	300	220	20,000
Total tuns in all Médoc, ordinary year..				49,420
Graves.				
Haut Brion	2,700	1,600	350	60
Second ditto.....	1,500	700	300	200
Third ditto	800	500	280	3,000
Common	500	300	250	10,000
St. Emillon.				
First class.....				
Second ditto.....	700	400	225	1,000
	450	280	200	3,000
Palus, Côtes, &c.				
Good Cargo Wine	400	250	180	30,000
Lower ditto	300	200	150	100,000
Produce of Gironde in common years..				961,680

(*continued*)

White Wines.	Good Years.	Middling.	Bad.	Tuns.
	Frs.	Frs.	Frs.	
Yguem, Coulet, Durvi, La Faurié, Binaud, Dayme	1,100	700	300	450
Perot, Dert, Guiroux, Baptiste, Carle, Pernaud, Cave, Latour blanche, Duboscq, Riousec, Boucheraud, St. Brice	950	600	300	700
Filhau, Hersoc, Fiton, Emérigon, Darche, Mareilhac, Laffont, Laborde, Monfaillis, Dlles, Duboscq, Brun	600	400	240	427
Ordinary Wines of Sauterne, Barsac, Preignac.	450	300	200	1,600
Cérons, Podensac, Fargues, Toulains, Virelade, Arbales, Pujos, St. Pays	500	350	180	2,400
Blanquefort, Villeneuve, Léognau	400	250	170	550
Flas, Landiras, Budos, St. Seve, St. Medard, St. Morillon, Labrede, Castres, St. Croix, Loupiac, Langoiran, Borêche, Tabanac, Paillet, Rions, Begage, Cadillac	270	200	135	8,000
Cambers, Quinsac, Camblanes, Bouillac, Florac, Jeuac	160	140	110	2,000
Entre deux mers	150	120	90	12,000
Average of White Wines in the Gironde				28,127

The export of French wines to England diminished as follows:—1828, 948,733 gallons; 1829, 792,171 gallons; 1830, 605,908 gallons.

[From Dr. Bowring's Parliamentary Report.]

No. III.

WINES OF THE SECOND AND THIRD CLASSES.—SPANISH.

Wines.	Place.	Character.
Val de Peñas	New Castile	Good body, deeper than Bordeaux in colour.
Manzanares	Manzanares	An inferior Val de Peñas.
Ciudad Real	New Castile	A tolerable red wine.
Albacete	Ditto	Ditto.
Vino Tinto, Alicant	Valentia	Yellowish red colour, when old called Fondellol.
Mataro	Catalonia	Good bodied and generous.
Torre, Beni Carlos, Santo Domingo, Segorbe, Perales, Vineroz	Valentia	Wines of good body, some of the most esteemed red growths of the country; colour deep.
Hospital	Arragon	Excellent flavour and body, from the Garnacho grape.

(*continued*)

Wines.	Place.	Character.
Carignena	Arragon	A vino tinto from the Garnacho grape
Tinto Olivencia	Estramadura	Excellent red wine, the best in Spain.
Tinto di Rota, or Tintilla	Andalusia	A sweet reddish cordial wine.
Ribidavia	Gallicia	An ordinary red wine.
Chacoli	Biscay	A very harsh austere wine.
Guindre	Malaga	Dark, flavoured with cherries.
Tinto di Malaga	Ditto	Seldom exported, a good wine.
Aleyor	Minorca, near Mount Taurus	A red wine, consumed on the island.
Palma	Majorca	A full bodied wine.
Cordova	Andalusia	Good red wines of the country.
Mirando de Ebro	Old Castile	
Carbezon	Valladolid	
Terra del Campo	Old Castile	
Velez Malaga	Malaga	A luscious sweet wine.
Malaga	Ditto	Ditto, with a burnt taste.
Pedro Ximenes	Ditto	Ditto, fine and delicate.
Malaga Xeres	Ditto	Resembling sherry, dry.
Xeres vino seco, pale and brown	Xeres de la Frontera	Pale and brown sherry.
Abocado	Ditto	A second growth sherry.
Huesca	Ditto	A yellowish white wine.
Paxarete	Ditto, and St. Lucar	A sweet wine of light amber colour.
Moguer	Niebla, Andalusia	Used to lower the sherries at Xeres, of which it is an inferior species.
Negro Rancio	Rota	A sweet wine of a yellow colour.
Montilla	Cordova	A dry wine, of good bouquet and flavour.
Borja	Arragon and Tarragona	A luscious wine.
San Lucar di Barameda	Andalusia	A light red muscadine.
Manzinilla	Ditto	Dry white, of inferior quality; a *vin du pays*.
Zalonge and Carlon	Ditto	Ditto.
Yepes	New Castile	A well-flavoured red wine.
Fuençeral	Ditto	A *vin de liqueur*.
Sitges and the Priory	Catalonia	Malmseys of two qualities.
Peralta and Tudela	Navarre	White dessert wines. Peralta is a Rancio when aged.
Pollentia	Majorca	A *vin de liqueur*.
Alba Flora	Minorca	A dry kind of Rhenish.
Vidona	The Canaries	A wine resembling Madeira, of inferior quality.
Verdonia	Ditto	A green wine, not now made.
Palma	Ditto	A rich Malmsey, having a taste of the pine apple.

No. IV.

The following is a statement of the importation of Spanish wines, from 1700 to 1834.

	Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.
1700	13,649	0	7	1746	505	0	37	1792	5,395	0	20
1701	11,184	2	17	1747	682	2	42	1793	4,363	2	47
1702	7,482	2	30	1748	2,706	3	44	1794	6,160	1	25
1703	1,359	0	52	1749	7,344	2	3	1795	8,088	3	62
1704	3,020	0	21	1750	5,714	1	1	1796	6,092	2	18
1705	3,011	1	9	1751	3,878	1	5	1797	2,259	0	57
1706	2,774	1	21	1752	2,918	2	50	1798	3,571	1	30
1707	3,277	2	25	1753	5,175	3	10	1799	6,676	3	15
1708	3,990	1	35	1754	4,168	1	30	1800	8,354	3	15
1709	4,904	1	58	1755	4,657	2	8	1801	6,335	3	61
1710	8,591	0	24	1756	3,669	3	55	1802	5,325	1	58
1711	6,786	2	7	1757	2,461	2	12	1803	6,871	2	56
1712	5,690	1	51	1758	4,613	1	12	1804	6,646	3	29
1713	7,031	3	10	1759	3,233	3	52	1805	9,393	2	25
1714	8,479	3	23	1760	3,843	1	50	1806	8,264	3	1
1715	9,265	2	7	1761	4,244	3	36	1807	7,640	3	28
1716	7,682	0	56	1762	2,611	1	12	1808	11,986	2	8
1717	9,106	1	60	1763	3,504	3	47	1809	10,939	0	46
1718	6,964	0	12	1764	3,720	3	8	1810	10,168	1	21
1719	6,154	2	62	1765	3,854	1	31	1811	4,541	3	22
1720	6,093	0	52	1766	4,633	0	8	1812	8,068	2	24
1721	9,484	1	3	1767	3,697	2	38	1813	Returns lost by fire.		
1722	12,063	0	58	1768	3,649	3	26				
1723	8,549	2	43	1769	3,970	3	42	1814	5,635	1	$58\frac{1}{4}$
1724	7,372	2	62	1770	4,194	3	59	1815	5,148	0	38
1725	8,762	1	4	1771	3,777	0	49	1816	3,392	2	15
1726	10,530	0	19	1772	3,012	2	28	1817	4,796	2	$7\frac{1}{3}$
1727	6,524	0	19	1773	3,965	0	12	1818	6,935	1	$16\frac{2}{5}$
1728	10,255	2	5	1774	3,532	1	28	1819	4,363	2	56
1729	9,791	0	25	1775	4,419	1	58	1820	4,302	3	$48\frac{1}{10}$
1730	10,427	2	36	1776	3,416	3	51	1821	4,286	2	$22\frac{2}{20}$
1731	9,696	0	43	1777	2,982	0	5	1822	5,475	1	$14\frac{7}{20}$
1732	9,166	1	23	1778	3,764	3	49		Imperial gallons.		
1733	9,092	2	15	1779	2,180	2	52	1823	1,541,919		
1734	8,392	3	47	1780	2,902	2	30	1824	1,955,168		
1735	9,598	1	16	1781	1,875	1	46	1825	2,531,095		
1736	8,667	3	54	1782	1,051	3	15	1826	1,988,964		
1737	10,673	2	17	1783	2,149	1	23	1827	2,242,765		
1738	9,935	2	28	1784	2,553	3	41		Home Consumption.		
1739	6,028	1	14	1785	2,769	3	8	1828	1,788,111		
1740	6,596	0	34	1786	3,139	3	11	1829	1,668,402		
1741	249	0	62	1787	4,216	0	16	1830	1,802,027		
1742	759	3	26	1788	4,701	3	7	1831	2,153,031		
1743	527	3	36	1789	3,999	0	14	1832	2,161,743		
1744	1,471	2	18	1790	4,868	3	0	1833	2,080,099		
1745	461	1	10	1791	6,519	3	11	1834	2,246,085		

No. V.

Wine imported into Great Britain from the Canaries, from 1785 to 1834.

	Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.		Tuns.	Hds.	Galls.
1785	65	2	35	1802	137	3	21	1819	1,578	0	$54\frac{3}{5}$
1786	69	1	44	1803	113	3	61	1820	1,071	1	$15\frac{7}{10}$
1787	83	2	39	1804	199	1	59	1821	892	3	42
1788	118	0	46	1805	229	0	53	1822	810	0	$3\frac{5}{20}$
1789	27	2	48	1806	537	3	47		Imperial gallons.		
1790	139	1	50	1807	608	0	46	1823	169,312		
1791	77	1	62	1808	1,683	1	28	1824	247,494		
1792	158	1	27	1809	1,659	0	12	1825	254,278		
1793	57	0	37	1810	1,563	3	44	1826	273,558		
1794	186	1	24	1811	1,139	3	51	1827	417,703		
1795	136	0	38	1812	2,266	2	$33\frac{3}{4}$	1828	107,919		
1796	122	1	38	1813	No returns.			1829	80,808		
1797	1	1	45	1814	2,039	0	$44\frac{1}{2}$	1830	83,822		
1798	434	1	15	1815	2,327	3	$41\frac{1}{2}$	1831	105,875		
1799				1816	835	0	3	1832	97.269		
1800	55	0	12	1817	1,132	2	40	1833	72,803		
1801	37	1	40	1818	1,762	1	34	1834	68,882		

No. VI.

SECOND AND THIRD CLASSES.—GERMAN.

WINES OF THE RHINE AND MOSELLE.

Wine.	Place.	Character.
Johannisberger	Johannisberg	Grown near the Schloss Johannisberger, in the list of first growths already given.
Steinberger	Rheingau	A very fine growth.
Rüdesheimer { Berg Hinterhaüser,....	Rheingau, six leagues from Mayence, facing Bingen; on the hill and slope behind the houses.	
Laubenheimer.....	Mayence district	Lighter than Johannisberger; fine bouquet.
Kœsterich	Ditto	A highly prized wine.
Niersteiner	Ditto	Lighter than Johannisberger, but delicate.
Oestricher.....	Ditto	Ditto.

(*continued*)

Wine.	Place.	Character.
Liebfrauenmilch	Worms	A good wine, with fine flavour and body.
Zornheimer	The Rhine	Ditto.
Hockheimer	Spire, on the River Mayn	Hence the word hock. The first growth is the prime hock wine of the importer. Light, agreeable.—12·08 average of spirit. Some kinds, when new, contain as much as 14·37, according to Mr. Brande.
Graefenberger	Rheingau	Choice wine, of fine flavour.
Gaubischeimer	Near Mayence, the palatinate	Light, agreeable, good bouquet.
Deidesheimer	Ditto	An excellent wine.
Oppenheimer	Ditto	Ditto.
Bodenheimer	Ditto	Ditto, light and delicate.
Nackenheimer	Ditto	An excellent wine, light and delicate.
Brauenberger	Moselle, Treves district	Of first quality.
Scharzberger	Ditto	Ditto.
Graach	Ditto	Ditto.
Zettingen	Ditto	Ditto.
Wehlen	Ditto	Ditto.
Piesport	Ditto	Ditto.
Montagne Vert	Ditto	Second quality.
Causel and Valdrach	Ditto	Moselle, noted for diuretic qualities.
Rinsport	Moselle, Witlich Canton	Secondary Moselle.
Bacharach	Near Mayence	Wine once in high repute.
Becherbach	Becherbach Canton	Secondary Moselle.
Walporzheimer	Upon the Ahr	Called wine of the Ahr.
Rutz	On the Moselle	Considered one of the Moselle wines.
Steeg	Near Bacharach	A light Rhine wine.
Montzingen	Ditto	Inferior ditto.
Bodendorf	Near Bonn	A secondary wine.
Affenbourg Hamen	Near Coblentz	Ditto, a Rhine wine.
Strang	Near Neider Breisig	Ditto.
Elzenburger	Ditto	Ditto.
Alzenburger	Ditto	Ditto.
Lutz	Near Treiss	Ditto.
Maas and Huhn	Niedar Heimbach	Ditto.
Stugerboeg	Rhine	Ditto.

(*continued*)

Wines.	Place.	Character.
Engehohe	On the Nahe	Called wine of the Nahe; secondary wines.
Neiderborg	Ditto	Ditto.
Leinenborn	Ditto	Ditto.
Bangert	Ditto	Ditto.
Rosenhech	Ditto	Ditto.
Rensberger	Tarbach	Secondary Moselle.
Wurzgarten	Tarben	Ditto.
Amfuhr	Burg, left bank of the Rhine	Ditto.
Rothenberger	Geisenheim	Soft, delicate, prime wine.
Scharlach	Mt. Scharlachberg	Fine flavoured; rich aroma.
Roth	Near Hockheim, Spire district	Hock of good quality.
Konigsbach	Ditto	Ditto.
Weinheim	Ditto	Ditto.
Forst	Ditto	Ditto.
Ungstein	Ditto	Ditto.
Schierstein and Narden	Wisbaden	Tolerable wines.
Epstein	Near Frankfort	Middling wines.
Phillipsech	Ditto	Ditto.
Reichenberg and Wildenstein	Erbach	Inferior Rhine wine in quality.
Fènerbach and Laufen	Near Fribourg, at Badenweiler	These are considered the best wines of Baden.
Heidelberger and Kleingenberger	Baden	Good wines of the country.
Richenau Island	Lake of Constance	Ditto.
Meresberg and Uberlingen	Near the Lake	Ditto.
Cretzingen	Baden	Ditto.
Berghausen and Stellingen	Ditto	Ditto.
Beringfield and Zeil	Bavaria	Inferior wine.
Lindau and Ravenspurg	Ditto	
Schweinfurt	Ditto	
Liest	Würtsberg	Excellent wine, Rhenish character.
Stein	Ditto	Ditto, of a very dear price.
La Harpe	Ditto	Inferior, but often sold for Stein.
Escherndorf and Schalhsberg	Ditto	Inferior to Stein.
Bischofsheim	NearHanau, Frankfort	A tolerable wine, resembling Rhenish.
Calmus	Trieffenstein, near Aschaffenbourg	A *vin de liqueur.*
Guben	Saxony	Very poor wines.
Meissen		
Franconia	Franconia	A *vin de paille;* aromatic.

(*continued*)

Wines.	Place.	Character.
Assmannshäuser	The Rheingau, near Rüdesheim	Equal to the second class of Burgundy; excellent body.
Bessingheimer	Lauffen, Wirtemberg	Well tasted, good bouquet; called wine of the Neckar.
Altenahr	Rhine country, left bank	Inferior wine.
Mayschof	Ditto	Ditto.
Rech	Ditto	Ditto.
Ahrweiler	Ditto	Ditto.
Bruch	Ditto	Ditto.
Creutzberger	Ditto	Ditto.
Hoënningen	Ditto	Ditto.
Kesseling	Ditto	Ditto.
Dernan	Ditto	Ditto.
Blischert	Lintz	A tolerable good wine.
Neuwied Blischert	Hesse Darmstadt	Ditto.
Wangen	Bavaria	Poor, though esteemed in the country.
Naumbourg	Saxony	Like fourth class Burgundy; styled *vins agrelets.*
The wine of Blood, Sang des Suisses	Bâle	A good wine, called also the Hospital and Cemetery of St. James.
Erlach	Berne	
Valteline	Made in the Valteline	Remarkable for durability.
Boudry and Cortaillods	Neufchâtel	Equal to third class Burgundy.
Cully	Near Lausanne, and Vevay	Like Rhenish.
Désalés		
La Côte	Between Lausanne and Coppet	Dry wines.
Bernang	St. Gall	Tolerable of the country.
Frangy and Monnetier	Geneva	
La Marque	Martigny	Red and white, and muscadine of tolerable quality.
Coquempin		
Chiavenna	Grisons	Aromatic, white, from red grapes.

No. VII.

The following is the importation of German Wines for the last hundred and thirty-four years.

	Tuns.	Hds.	Gall.		Tuns	Hds.	Gall.		Tuns.	Hds.	Gall.
1700	1,430	3	56	1746	162	2	16	1792	139	1	1
1701	789	1	39	1747	180	3	45	1793	110	2	27
1702	693	3	21	1748	193	1	18	1794	129	1	37
1703	748	0	10	1749	275	1	33	1795	36	0	1
1704	667	3	33	1750	272	2	17	1796	54	0	12
1705	441	1	49	1751	260	0	48	1797	48	1	15
1706	331	1	47	1752	249	1	53	1798	61	3	56
1707	568	3	50	1753	242	2	5	1799	92	3	45
1708	584	3	31	1754	219	0	0	1800	19	2	18
1709	544	1	46	1755	213	3	9	1801	105	3	45
1710	434	1	17	1756	198	2	25	1802	114	2	4
1711	514	3	14	1757	171	2	33	1803	158	0	42
1712	387	2	27	1758	163	1	46	1804	34	3	2
1713	378	0	47	1759	182	2	23	1805	21	0	56
1714	103	3	34	1760	219	3	53	1806	103	1	57
1715	502	3	34	1761	189	1	47	1807	144	0	59
1716	476	1	54	1762	186	0	33	1808	6	2	8
1717	418	3	61	1763	199	1	0	1809	43	2	5
1718	495	1	16	1764	176	1	31	1810	33	1	9
1719	418	0	42	1765	230	3	39	1811	110	0	39
1720	529	1	38	1766	205	1	25	1812	23	1	$30\frac{1}{4}$
1721	444	2	59	1767	225	0	58	1813	No Return.		
1722	406	0	13	1768	176	3	12	1814	126	3	$56\frac{1}{2}$
1723	491	1	35	1769	179	3	31	1815	140	3	$18\frac{1}{2}$
1724	332	0	28	1770	140	2	62	1816	121	2	$42\frac{4}{5}$
1725	269	0	50	1771	164	3	62	1817	85	0	$28\frac{2}{5}$
1726	397	1	49	1772	151	1	8	1818	153	2	$62\frac{2}{5}$
1727	509	1	6	1773	125	0	39	1819	120	1	$60\frac{2}{5}$
1728	476	3	12	1774	125	0	37	1820	130	1	$58\frac{7}{10}$
1729	616	1	12	1775	160	0	40	1821	110	1	$45\frac{13}{20}$
1730	480	2	29	1776	126	3	50	1822	115	3	$31\frac{6}{20}$
1731	413	2	41	1777	151	0	28				
1732	412	1	33	1778	111	1	16		Imperial Gallons.		
1733	325	2	56	1779	88	3	41	1823	26,332		
1734	367	2	60	1780	128	0	54	1824	27,666		
1735	312	0	27	1781	94	1	34	1825	146,346		
1736	198	3	2	1782	219	1	15	1826	86,023		
1737	312	3	15	1783	196	2	2	1827	79,784		
1738	276	3	4	1784	124	3	19	1828	84,264		
1739	211	2	32	1785	133	3	47	1829	71,641		
1740	221	1	14	1786	187	3	52	1830	66,213		
1741	204	2	17	1787	177	1	32	1831	71,423		
1742	250	0	16	1788	138	2	27	1832	60,568		
1743	205	1	3	1789	117	0	6	1833	38,197		
1744	219	0	5	1790	122	1	26	1834	43,758		
1745	162	3	33	1791	128	1	40				

No. VIII.

SECOND AND THIRD CLASSES.

PORTUGAL WINES.

Name.	Province or Town.	Remarks.
Carcavellos, or Lisbon	Between Œiras and Carcavellos	Sweetish, white, well known in England.
Bucellas	Near Lisbon	A fiery wine, from brandy being mingled with it; something like Barsac when pure.
Vinho de Termo	Estremadura	A light ordinary wine of the country.
Setuval	Ditto	Two kinds, dry and muscadine; both good.
Lamego	Near Coimbra	An inferior kind of Bordeaux.
Alenquer, Monçaon	Estremadura	As the former, but somewhat better in quality.
Santorin	Near Lisbon	An ordinary wine.
Barra a Barra	Near Lavadrio	A good wine.
Colares	Near Cintra	A light port, of good quality.
Pezo da Regoa, Abasas, Villarinho des Freires, Gorvaens, Alvacoès do Corgo, Hormida, Guials, Convelinhas, Galafura	On the Douro	Wines of the Douro, of the first and second qualities, or Feitoria and Ramo.

No. IX.

PORTUGAL WINES imported into Great Britain from 1700 to 1834.

	Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.
1700	7,757	1	47	1719	12,171	0	33	1738	11,487	2	10
1701	7,408	2	31	1720	11,152	1	44	1739	11,747	1	47
1702	5,924	3	60	1721	14,086	3	26	1740	7,524	3	28
1703	8,845	1	60	1722	11,580	0	18	1741	16,559	1	14
1704	9,924	2	49	1723	12,336	3	41	1742	15,270	0	20
1705	8,449	2	59	1724	14,222	3	50	1743	16,611	2	56
1706	7,709	0	23	1725	14,403	2	30	1744	8,028	3	27
1707	9,011	3	44	1726	7,772	3	41	1745	15,209	2	40
1708	9,637	2	24	1727	12,945	3	35	1746	11,450	2	35
1709	7,651	0	19	1728	18,208	0	58	1747	13,490	2	30
1710	6,729	3	18	1729	14,371	1	25	1748	11,820	1	40
1711	7,647	3	54	1730	8,279	2	5	1749	13,470	2	29
1712	6,483	0	36	1731	13,122	1	58	1750	9,050	0	60
1713	5,975	2	51	1732	10,939	2	37	1751	10,188	0	47
1714	8,965	1	8	1733	11,162	0	32	1752	10,132	3	4
1715	10,721	3	46	1734	11,723	1	10	1753	12,815	0	58
1716	9,105	2	37	1735	13,838	1	0	1754	10,036	1	9
1717	10,340	0	26	1736	11,367	2	13	1755	11,022	3	34
1718	14,617	2	41	1737	14,985	1	14	1756	7,841	0	20

(*continued*)

	Tuns.	Hds.	Gall.
1757	11,066	2	24
1758	10,826	1	27
1759	11,669	2	44
1760	10,986	3	33
1761	9,622	0	10
1762	12,995	2	33
1763	12,936	3	39
1764	13,046	3	59
1765	13,506	1	34
1766	13,135	3	37
1767	12,619	1	39
1768	14,311	3	36
1769	13,760	1	17
1770	11,919	3	18
1771	12,396	2	7
1772	11,957	3	52
1773	11,847	0	44
1774	13,773	2	39
1775	12,658	3	61
1776	12,755	1	13
1777	14,482	0	55
1778	11,871	1	46
1779	10,127	2	9
1780	17,107	1	48
1781	10,963	0	28
1782	8,063	0	58
1783	10,908	1	56
1784	11,434	3	13
1785	12,171	0	$6\frac{1}{2}$
1786	11,770	1	37
1787	16,087	0	13
1788	18,039	3	27
1789	19,839	1	35
1790	21,431	3	22
1791	23,606	0	17
1792	26,938	3	23
1793	15,629	2	9
1794	22,229	3	40
1795	25,286	2	1
1796	15,017	2	58
1797	12,420	2	14
1798	16,956	3	11
1799	24,300	1	10
1800	20,738	0	47
1801	28,669	1	27
1802	22,023	0	7
1803	27,682	3	53
1804	9,849	2	3
1805	20,003	0	61
1806	19,848	1	38
1807	23,914	1	62
1808	22,093	0	16
1809	20,578	1	61
1810	27,360	0	39

	Tuns.	Hds.	Gall.
1811	9,260	2	19
1812	15,007	3	28
1813	Returns lost by fire.		
1814	15,498	0	$48\frac{3}{4}$
1815	16,913	0	60
1816	8,215	0	$35\frac{2}{5}$
1817	14,125	1	$36\frac{4}{5}$
1818	17,944	2	$4\frac{3}{4}$
1819	10,311	1	$24\frac{3}{5}$
1820	10,598	1	$24\frac{1}{2}$
1821	12,092	3	$13\frac{12}{20}$
1822	14,814	2	20

	Imp. Gall.
1823	2,775,941
1824	2,392,557
1825	4,587,616
1826	2,883,891
1827	3,063,394
1828	3,008,808
1829	2,416,132
1830	2,608,311
1831	2,933,176
1832	2,762,935
1833	2,617,405
1834	2,596,530

TOTAL EXPORT OF WINES FROM OPORTO,

PIPES, FROM 1824 TO 1833, INCLUSIVE.

	England.	Other Parts.	Total.
1824	19,968	6,149	26,117
1825	40,277	170	40,477
1826	18,310	287	18,597
1827	24,207	10,030	34,237
1828	27,932	13,295	41,227
1829	17,832	7,539	25,371
1830	19,333	4,832	24,165
1831	20,171	3,268	23,439
1832	13,573	2,977	16,550
1833	19,432	1,063	20,495

No. X.

WINES OF MADEIRA AND THE AZORES.

Name.	Province or Town	Remarks.
Malvasia, or Malmsey....	Madeira	Rich and sweet.
Madeira	Ditto	A durable, dry wine.
Sercial	Ditto	Ditto, of excellent quality.
Muscatel	Ditto	Not exported; a good wine.
Tinto	Ditto	A red wine, changing in twenty years to rich old Madeira in colour.
Figaa do Pereiro	Ditto	Of inferior kind to the above.
Santo Antonio	Ditto	
*Vino Passado	Pico in the Azores	A species of Malmsey, of light quality; keeps ill.
*Vino Seco	Ditto	A dry wine, light, not durable.

* The importations of these wines are included in the list of miscellaneous wines imported.

No. XI.

MADEIRA WINES imported into Great Britain from 1785 to 1834.

	Tuns.	Hhds.	Gall.		Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.
1785	613	2	26	1802	1,497	3	38	1819	2,922	0	$28\frac{1}{5}$
1786	526	2	9	1803	1,564	0	1	1820	2,617	1	$61\frac{1}{5}$
1787	578	1	41	1804	1,075	0	40	1821	2,411	2	$44\frac{3}{20}$
1788	1,074	2	13	1805	1,101	3	41	1822	2,046	1	$59\frac{10}{20}$
1789	1,174	1	12	1806	1,605	2	61		Imp. Gall.		
1790	1,464	3	45	1807	1,981	3	32	1823	450,417		
1791	1,623	2	58	1808	2,790	0	50	1824	489,816		
1792	1,252	0	42	1809	2,902	1	44	1825	541,453		
1793	1,007	3	0	1810	2,353	1	24	1826	569,668		
1794	783	2	10	1811	1,518	0	33	1827	308,041		
1795	699	3	52	1812	2,035	2	$47\frac{1}{2}$	1828	258,795		
1796	501	1	23	1813	No returns.			1829	218,311		
1797	287	3	0	1814	2,018	2	$50\frac{1}{4}$	1830	204,956		
1798	659	0	17	1815	1,826	0	$11\frac{1}{5}$	1831	228,221		
1799	671	0	41	1816	1,512	1	$3\frac{1}{5}$	1832	219,102		
1800	967	2	42	1817	1,270	2	$58\frac{1}{5}$	1833	159,898		
1801	1,777	0	54	1818	2,316	2	$4\frac{2}{5}$	1834	161,042		

No. XII.

FROZEN WINE. (Pages 47 and 177.)

Ancient writers have said that in some parts of Germany, during the Augustan age, the cold was so intense that the wine was frozen in the casks, and cut out with hatchets. This is not improbable, where the cold is powerful enough to freeze a cask through. Mr. Parkes made some expriments on wine exposed to a degree of cold of 22° below the freezing point, and it was singular enough, that this gentleman stated he could not find any difference in taste, between the frozen and unfrozen portions, and he even thought the fluid part tasted more vapid than the other. The proportions were as follows: of Port wine 560 grains froze, and 580 remained liquid. Of Sherry exposed in a similar situation, 288 grains were frozen, and 1,056 remained liquid.

No. XIII.

NEW RHINE WINE AND CHAMPAGNE. (Pages 84 and 211.)

" With regard to the effervescent Rhenish wines, which have lately come into notice, I need not tell you, that they are made after the example of Champagne wines. They are generally taken from a *common* growth, and the effervescence is produced by the carbonic acid gas in the process of fermentation. The experiment is *not* new: my own people tried it successfully *many* years ago, but after all it will never answer, for although the effervescence of a Champagne wine may be thus obtained, yet the delicious flavour, which characterises that wine, will be always wanting, for this flavour is derived from the soil, and no art can substitute it! Besides it must be observed, that there is an immense difference between the Rhenish wines and those of Champagne, not only in the making, but also in character. The grape of the former requires, in order to be really good, the most perfect maturity, even to a rotten state, and the grape of the latter does not admit of its being more than ripe; consequently all the good qualities of the Rhenish wine, which are

brought forth by the great maturity of the grape, are entirely lost when thus prematurely used, and for this reason nothing particular can be expected from an effervescent Rhenish wine. The process is resorted to, principally, with a view to get rid of the lower growth of wines, and with no other.

" I am particularly pleased with the account you give of the Champagne wines: it strikes me, however, that I may venture to submit to your notice the new mode which has been adopted by an establishment at Rheims, for getting wines of an *uniform* quality, the want of which used to be a constant, and I may add, a very just complaint. Most of the wine-merchants at Rheims and Epernay, put their wines into small casks, or pieces of 160 litres each, and the wine had to undergo in them all the various operations mentioned in your book. It is very evident then, that it is almost impossible to have an uniform wine; each cask must and will be different: besides, wine never will develope itself so well in a small vessel as it will in a large one. In order to remedy this, the firm at Rheims, of Messrs. Mumm, Geisler, and Co., thought it a good plan to get some large Rhingau tuns, and actually got tuns of about 12,000 *litres* each, into which they put the new wines, and it was surprising to see the difference. The wine not only developed itself far better than it used to do in the smaller casks, but the process of fermentation and all the other operations went off beyond expectation, and the great object to have a wine of an uniform quality was thus most satisfactorily obtained. This new mode has not been adopted generally yet: the great expense of the tuns, which must be got from the Palatinate, has deterred others from adopting it; but the advantages are so great, that there is no doubt it will be very soon followed by every other house; meanwhile, I believe that this is the only firm at Rheims which makes use of those immense tuns, and which thus can be sure of having in all respects an uniform wine."—*Letter to the author from Cologne, received since the first edition was published.*

No. XIV.

" METHUEN TREATY." (Page 215.)

Treaty between England and Portugal, signed Dec. 27, 1703.

" ART. 1.—His sacred Royal Majesty of Portugal promises, both in his own name and that of his successors, to admit for

ever hereafter, into Portugal, the woollen cloths and the rest of the woollen manufactures of the Britons, as was accustomed until they were prohibited by the laws; nevertheless, upon this condition:

"2.—That is to say, that her sacred Majesty of Great Britain shall, in her own name and that of her successors, be obliged for ever hereafter to admit the wines of the growth of Portugal into Great Britain; so that at no time, whether there shall be peace or war between the kingdoms of Great Britain and France, any thing more shall be demanded for these wines, by the name of customs or duty, or whatsoever other title, directly or indirectly, whether they shall be imported into Great Britain in pipes or hogsheads, or other casks, than what shall be demanded from the like quantity or measure of French wine, deducting or abating a third part of the custom or duty; but if at any time this deduction or abatement of customs, which is to be made as aforesaid, shall in any manner be attempted and prejudiced, it shall be just and lawful for his sacred royal Majesty of Portugal again to prohibit the woollen cloths, and the rest of the British woollen manufactures.

"3.—The most excellent Lords of the Plenipotentiaries promise and take upon themselves that their above-named masters shall ratify this treaty, and that within the space of two months the ratification shall be exchanged.

"*Given at Lisbon, the 27th Dec.* 1703.

"Marchis Alegretensis."

"John Methuen."

"NATURAL EFFECTS OF THE MONOPOLY." (Page 230.)

The Oporto Company seem to have possessed astonishing power over the seasons; in that the wines were rarely affected in price by bad or good vintages, but came to England in the same qualities and prices as usual, however they went to other countries. It must be observed, that the Company fixed the time of the vintage often without any regard to the chance of the rains setting in, these taking place some seasons a few days sooner than others, and thus injuring the vintage. Whether they delayed it to the last moment, in hopes to obtain a riper and more perfect vintage, or whether any motive more ignoble

was the cause, is not clear. In the fine climate of Portugal the hazard from bad seasons must be thought very slight, much less than in Burgundy. Neither in a good season in Burgundy, nor any where else, would the first class of wines be some very fine and some very bad. First and third classes would be equally affected by a good or bad season, but this is not the Company's experience in a steady southern climate. The prices of the wine, nevertheless, have nothing to do with the quantity or quality. The following years carry the prices of the better wines per tun, and the character of the year's vintage. The years 1797 and 1798, it must be observed, were years both marked "very bad;" 1799, 1800, and 1801, the same. In the natural course of events, the wine of one year would be materially affected by the bad season preceding, did not monopoly interfere.

Years.	Quality.	Prices per Tun of Two Pipes.	Pipes grown.	Pipes imported.
1799	Bad	82 10 0	64,251	48,600
1800	Bad	92 10 0	72,484	41,476
1801	Generally bad, some good	89 3 0	71,658	57,338
1802	Good	71 18 0	46,263	44,046
1803	Good	94 9 0	73,430	55,364
1804	Good	89 10 0	76,655	19,698
1805	Middling	82 9 0	76,550	40,006
1806	Very good	86 9 0	57,869	39,696
1807	Ordinary	84 19 0	54,707	47,828
1808	Middling	94 9 0	56,524	44,186
1809	Middling, but some of high flavour	98 9 0	38,633	41,156
1810	Some good, of full flavour, but light	114 9 0	36,250	54,720
1811	Some good	104 to 110	42,663	18,520
1812	Good, some very fine	133 0 0	55,913	30,005
1813	Ordinary	108 0 0	no ret.	no ret.
1814	Ditto	105 0 0	..	30,996
1815	Very good	93 6 8	..	33,826
1816	Middling	84 0 0	47,819	16,430
1817	Ordinary	84 0 0	37,422	28,250
1818	Middling, some good	96 0 0	53,831	35,888
1819	Ditto, some high flavoured	96 0 0	73,936	20,622
1820	Very good	78 13 4	70,231	21,196

The total exportation of wines from Oporto has not increased of late years. In 1819 there were 13,146 pipes less exported than in 1780, and in 1820 the quantity was 4,486 less.

It will be seen that the price of 1800, after no less than three bad years, is nearly equal to the good years. It is remarked in

other countries, that abundant years are, for the most part, years of good quality and good prices, but then they have not the enjoyment of a chartered company to balance natural disadvantages.

These and other abuses were often noticed, but the treaty and the Company, twin evils, stifled every thing like resistance to their despotism. The Company was always triumphant. The same wine has been shipped to England from Oporto, in virtue of the treaty, at 40*l.* a pipe, and to other countries at 20*l.*! The Board of Trade in vain pointed out the character of this monopoly in 1767.

In 1775, Sir Edward Barry remarks, that the port wines of that time were got much heavier and more heating than they formerly were, and took much longer time to mature.

"MODIFICATION OF THE COMPANY'S CHARTER." (Page 224.)

"1. The General Company for the Superintendence and Encouragement of the Vineyards of the Alto Douro shall continue in existence, in as far as the production of wines in that district shall exceed the quantity exported and used for home consumption.

"5. The existing divisions of Feitoria and Ramo shall cease: but the exterior line of demarcation shall be retained, comprehending all those lands which are now planted, or may afterwards be planted with low vines, within the said boundary.

"6. The Directors of the Company shall continue, as heretofore, to take an account of the quantity and qualities of wine produced, and to regulate the tonnage upon it.

"9. The Government, on receiving the Report of the Directors, shall determine, according to the circumstances, both the day for the opening of the fair of the Douro, and the time for its duration; provided always, that the opening be not deferred beyond the second day of February.

"10. The preferences which the law had accorded to the Company, and the legitimate export merchants (negociantes legitimos exportadores), are declared to be abolished.

" 11. Every citizen shall be at liberty to purchase wines in the Alto Douro, and to sell them in the town of Oporto, or wherever else he may find expedient, as well as to distil any wines, whether of his own manufacture, or bought by him.

" 12. The Company shall be obliged to purchase, at the price fixed by the law of the 21st September, 1802, all the wine remaining unsold after the fair of Regoa, that shall be offered to it by the farmers, until the end of March.

" 13. The wine mentioned in the preceding article, in case it be not exported, may be applied to the same purposes as the inferior wines, or sold for distillation.

" 18. Only the Directors of the Company shall have the right to sell and import brandy for preparing and mixing with wines, within the barriers of Oporto, Villa Nova de Gaya, and the line of demarcation of the Alto Douro.

" 30. The present degree shall continue in force for the space of five years, or until the whole or any of the articles contained in it shall be revised or altered in such manner as may be judged fit."

DECREE

PRESENTED BY JOSE DA SILVA CARVALHO, DECLARING LISBON AND OPORTO FREE PORTS.

" Art. 1. The port of Lisbon is free to all merchant vessels of every country, not at war with Portugal; and every kind of merchandize and articles of commerce will be admitted into it for deposit, wheresoever produced, or under whatsoever flag imported.

" 9. All the provisions of the present decree shall be extended to the city of Oporto, as soon as the measures necessary to facilitate its execution shall be taken.

" The Minister for the Affairs of Finance will take notice hereof, and see to its execution.

(Signed) " Don Pedro, Duke of Braganza.

" *Palace das Necessidados, 22d March*, 1834."

A previous decree, dated April 3, 1833, permitted the import of foreign wines into Oporto by sea or land, upon payment of a duty of 20 per cent. *ad valorem*.

DECREE. (Page 232.)

" Taking into consideration the reports of the Ministers of the Interior and of Finance, and with the advice of the Council of State, I think fit, in the name of the Queen, to decree as follows :—

"Art. 1. All the privileges, authorities, prerogatives, and immunities, of whatever nature or denomination, granted to the Wine Company of the Alto Douro, and to the Junta of its administration, from the time of its establishment to this day, are abolished.

" 2. The free disposal of their vineyards and wines is accordingly restored to the cultivators of the Upper and Lower Douro, as to those of all other parts of these kingdoms.

" 3. All imposts hitherto laid on the wines of Oporto, with the exception of the subsidio litterario, and of the duties on consumption in the city of Oporto and its district, as well as that of 12,500 reis on each pipe exported from the Foz of the Douro, are abolished.

" 4. The subsidio litterario shall be received, as in every other place, by the Receiver General and his deputies.

" 5. The duties on consumption shall be received in the same manner, but those on exportation will be paid at the Custom-house of the city of Oporto, on the manifests which are to be presented by the sellers and exporters under the penalties ordered in such cases.

" 6. The company shall convoke the shareholders within a month, to deliberate with them on the settlement of the accounts, the employment of their property, and their interests.

" 7. All ordinances and regulations whatsoever contrary to the present decree are abolished, as if they were expressly mentioned. The Ministers of the Interior and Finance are charged with the execution of the present decree.

" Don Pedro, Duke of Braganza.
" Bento Pereira Da Carmo.
" Jose Da Silva Carvalho.

" *Palace das Necessidados, May* 30, 1834."

MADEIRA. (Page 237.)

A decree relative to Madeira, is as follows:—

"1. All such goods and merchandize as are admitted to pass through the Custom-houses in Portugal shall have the same privilege at the Custom-house of Funchal, in the island of Madeira.

"2. The Custom-house at Funchal will be regulated in every respect by the practice of the one at Lisbon, excepting in any thing which may be peculiar to that island.

"3. Its wines will pay a duty of three per cent. when exported to Portugal, and of eight per cent. when to foreign countries, upon the valuation of sixty milreas per pipe; all other produce of the country, such as fruits, salt fish, sweetmeats, &c., will only pay one per cent. on exportation.

"4. Each pipe of wine which may be ripened by stoving shall be subject to a duty of two milreas per month."

N.B. The reason assigned for this is, that the government consider the quality of the wines injured by this process, and they wish, by the imposition of this tax, to discourage its continuance. The other articles are not of any general importance.

No. XV.

SECOND AND THIRD CLASSES.

ITALIAN AND SICILIAN WINES.

Name.	Province or Town.	Remarks.
Lacryma Christi	Naples, Mount Vesuvius	Red rich muscadine, of a fine flavour and perfume.
Syracuse	Sicily	Luscious red muscadine.
Reggio	Naples	Resembling Burgundy.
Baia	Ditto	Ordinary wine.
Mascoli	Sicily, Mount Etna	The best red wines in the island, of excellent body, like the secondary Rhône growths; rare in the island.
——— Sciarra		
——— Macchia		
——— San Giovanni		
Catania	Ditto	Pitchy taste, ordinary wines.
Tormina and Faro	Ditto	Tolerably good.
Ovièto	Roman States	Excellent durable red wines.
Asti	Piedmont	Ditto.
Bianillo and Aleatico	Elba	Good wine of the second class.
Bischillato	Ditto	A durable wine, exports well.
Procanico	Ditto	A *mousseux* wine.

(*continued*)

Name.	Province or Town.	Remarks.
Chianti	Tuscany	A good wine.
Aleatico	Ditto	Resembling the Tinto of Alicant in flavour and bouquet.
Carmignano, Antella, Artiminio, Tizzana, Mentali, Lamporecchio, Monte Spertoli, Poncina, Glogoli	Ditto	Good wines of the country.
Val di Marini	Ditto	Ditto.
Naples muscadine	Mount Vesuvius, Lake Averno, Maria de Capoua	A delicate fine coloured wine.
Vino Greco	Ditto	An excellent muscadine.
Carigliano	Naples	Muscadine, flavour of fennel.
Bari and Tarento	Ditto	Muscadine and common.
Reggio	Ditto	*Vin de liqueur.*
Baia	Ditto	Good ordinary wine.
Gierace	Near Reggio	Between light French wine and *vin cuit.*
Asprino	Campagna	A *vin de mousseux.*
Fundi	Kingdom of Naples	Good ordinary wine.
Val di Massara — Mazara, Veterano, Coriglioni, Termini, Girgenti	Sicily	Of tolerable quality.
Messina, Milazzo, Avola, Vittoria	Ditto	Ditto.
Lipari and Stromboli	Lipari Isles	Ordinary wines and superior muscadine.
Imola	Near Bologna	*Vin cuit* and *mousseux.*
Terni	Near Spoleto	Good wines.
Farnese	Near Castri	Good muscadine.
Ovièto (white)	Roman States	Muscadine, not durable.
Monte Fiascone	Near the Lago Bolsena	A strong muscadine, finely perfumed and flavoured; of great strength.
Albano	Roman States	Ditto, excellent.
Moscatello, Aleatico, Vino Santo, Vernaccia	Ditto	*Vins de liqueur*, of greater or less merit; not bearing exportation.
Riccia	Ditto	Good wine, but a small quantity made.
Buti	Plain of Pisa	Weak wine.
Monte Pulcino	Tuscany	The most esteemed of the Tuscan muscadines.
Montalcino, Rimeneze, Pont-Ecole and Santo Stephano	Ditto	Good muscadines.
Vermut	Elba	A cordial wine, prepared with wormwood, &c.
Rio	Ditto	Good muscadine.

(*continued*)

Name.	Province or Town.	Remarks.
Vino Morto	The Veronese	Deficient in spirit and strength.
Vino Santo	Ditto	Good red and white wines.
Bellagio	Lake of Como	Wines of colour and spirit.
Labusca	Mantua	An agreeable wine.
Pavia	Pavia	Both dry and *mousseux*, but very inferior wines.
Monte di Brianza	Milan	Good flavoured wines.
Panocchia, Vigatto, Traversetolo, Casola, Avola, Azano	Parma	Ordinary wines of the country.
Val Irdone, Bottola, Ponté d'Allolio, Verdetto, Sala del Christo Creta	Placentia	Ditto.
Santo Pretasso, Frescale, Caselle, Lassurasco, Rugarlo, Castellina, Salso Maggiore, Villa-Chiara, Claretto, Pazolo	District of Borgo Placentia	Inferior wines, some of them *vins de liqueur*, having a disagreable taste of honey.
Ratrera and Sapolo	Modena	Ordinary wine for home consumption.
Vin Piccolit	Friuli	Resembling Tokay.

No. XVI.

These Italian wines, as well as the Sicilian, the Azores, &c. and other kinds, except those from the Cape of Good Hope, are included in the following list of miscellaneous and unrated wines imported, of which the varieties are not specified.

	Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.
1785	62	3	21	1802	71	3	53	1819	919	2	$11\frac{2}{3}$
1786	73	1	10	1803	177	2	29	1820	1,044	3	$8\frac{2}{3}$
1787	54	0	61	1804	188	0	58	1821	1,159	3	5
1788	42	2	13	1805	20	3	3	1822	755	1	$2\frac{4}{20}$
1789	27	1	45	1806	156	2	0		Imp. Gall.		
1790	15	3	7	1807	161	3	21	1823	176,141		
1791	22	2	54	1808	746	0	7	1824	265,217		
1792	24	3	55	1809	535	0	5	1825	331,268		
1793	30	0	35	1810	1,362	2	25	1826	268,853		
1794	12	0	30	1811	874	3	35	1827	223,850		
1795	13	2	40	1812	2,539	0	$42\frac{3}{4}$	1828	174,590		
1796	95	1	39	1813	No returns.			1829	206,669		
1797	37	1	23	1814	1,894	1	$5\frac{1}{2}$	1830	238,909		
1798	27	0	60	1815	889	1	19	1831	259,709		
1799	16	1	24	1816	897	3	$15\frac{4}{5}$	1832	262,006		
1800	18	3	3	1817	641	3	$35\frac{2}{5}$	1833	253,084		
1801	60	2	10	1818	1,204	1	12	1834	313,732		

No. XVII.

SECOND AND THIRD CLASS.

HUNGARIAN, AUSTRIAN, AND SCLAVONIAN WINES.

Name.	Province or Town.	Remarks.
Tokay, Essence, and Ausbruch	Near Mount Tokay, Hungary	See wines of first class.
Tokay, Maslas	Ditto	A secondary Tokay.
Gyængyæsch	Mount Matra, Upper Hungary	Wines both red and white, much esteemed.
Œdenbourg	Lower Hungary	Ditto
Meneser	District of Arad, ditto	Red kind, much esteemed for spirit and sweetness.
Meneser-Ausbruch	Ditto	Like Tokay, preferred by some; rich, aromatic, sweet, not cloying.
Erlon	Upper Hungary	Good red and white wines, and an Ausbruch.
Rusth	Lower Hungary	Similar to Œdenbourg.
St. Gyorgy	Near Presburgh	A white wine of excellent quality, somewhat in aroma like Tokay.
Ofen	Near Pesth	Good wine of the country.
Carlowitz	On the Danube, in Sclavonia	Resembles Côte Rotie.
Buda	Near the ancient capital	Like Burgundy.
Sexard	Between Buda and Esseh	Resembles Languedoc, a good red wine of the country.
Gros Warden	Near Transylvania, the fortress	Ditto
Schiller	In Sirmien	Strong and sweet, of a red colour.
Wermuth — Palunia, Tropfwermuth	Ditto	Wines prepared with spices and wormwood.
Glodova, Menos, Gyordk, Paulis	Menes	Scarcely different from Meneser.
Modeon	Near Presburgh	Excellent wine, resembling Burgundy.
Katschdorf, Grunau, Obernusdorf	Ditto	Ditto
Neustoed, Zschelhæ, Kosrad	Near Buda	
Wersitz, Jobbagy, Etsey, Sœtvesch	In the Bannat	Wines like Burgundy and Bordeaux
Weisskirchen	Bannat of Tameswar	Good red wine.
Zips, Arva, Liplow	Ditto	Ditto.
Buokwetz	Croatia	White wine.
Vinitza, Toeplitz	Ditto	Ditto; same quality.
Birthalman	Transylvania	Wine of the country, Ausbruch

(*continued*)

Name.	Province or Town.	Remarks.
Marachina	Sebenico, Dalmatia	A wine highly characterised; not the *liqueur*.
Cotnar	Moldavia	Green in colour, and strong as brandy.
Piatra	Wallachia	Light, rivalling Tokay.
Gravosa	Ragusa	Good country wine.
Semlin	Sclavonia	Good red wine.
Syrmia and Posega	Ditto	Both red, and of agreeable flavour, and much spirit.
Podskalski	Circle of Leutmeritz, Bohemia	Red wines, which will not keep.
Melnick	Circle of Bunzlow	Ditto, like Burgundy.
Poleschowitz	Moravia	Good wines, equal to Hungarian.
Mount Calenberg	Austria	Ordinary wine.
Hoeflein, Kloster Newbourg, Unter Kutzendorf, Kaplenburg, Misdorf, Salnendorf, and Lichtenstein	Ditto	Wines of little note, generally of a green hue, and drank young.
Giberwein	Southerly, near Vienna	A wine that will keep, though of no extraordinary quality.
Spitz	Ditto	Good wine.
Luttenberg	Lower Styria	Good wines, red and white.
Radkersbourg, Arnfels, Windisch, Gonowitz, Kerchenberg	Ditto	Of the next rank to the foregoing.
Sansal, Leitschach, Pickerne, Stadlberg, Pulsgau, Sauritsch, Raen, Rast, Peittersberg, Wiesel	Ditto	Good wines of the country.
Moettling, Weinitz	Carinthia	Resembling good Italian wines.
Freyenthurn, Wipach, Tscheremble, Marzamin	Ditto	Ditto
Prosecco Antignana, St. Serf Trieste	Istria	Red and white, sparkling and well flavoured.
Berchetz	An Adriatic island	Red wine, deep coloured, and sweet.
St. Patronio, Petit Tokai, St. Thomas, &c.	At Capo d'Istria, Pirano, Cittanova	Good *vins de liqueur*.
Corregliano	Istria	A good wine, consumed at Venice.
Izeszgard	In the Tolna district	A superior red wine.

Importations included in preceding list. Page 393.

No. XVIII.

WINES of the CAPE OF GOOD HOPE, imported from 1801 to 1834, inclusive.

	Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.		Imperial Gallons.
1801	45	2	57	1812	40	2	56	1823	843,172
1802	15	3	58	1813	No returns.			1824	591,078
1803	13	1	31	1814	349	3	55	1825	746,925
1804	8	3	8	1815	1,512	1	4	1826	356,070
1805	0	2	14	1816	1,631	2	$21\frac{2}{5}$	1827	679,447
1806	9	0	57	1817	4,218	0	29	1828	699,805
1807	20	3	42	1818	3,648	0	$15\frac{3}{5}$	1829	653,742
1808	178	1	30	1819	1,648	3	$19\frac{4}{5}$	1830	580,408
1809	16	0	36	1820	1,925	0	$60\frac{4}{5}$	1831	537,188
1810	19	3	41	1821	2,113	2	$12\frac{10}{20}$	1832	540,357
1811	8	2	19	1822	2,244	0	$2\frac{17}{20}$	1833	514,262
								1834	545,191

No. XIX.

TOTAL FRENCH, SPANISH, RHENISH, and PORTUGUESE WINES imported into GREAT BRITAIN from 1700 to 1785.

	Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.		Tuns.	Hds.	Gall.
1700	23,502	0	10	1729	25,672	3	50	1758	15,896	1	54
1701	21,443	2	23	1730	19,823	3	31	1759	15,405	2	19
1702	15,725	1	62	1731	24,239	1	58	1760	15,427	3	47
1703	11,092	2	42	1732	21,384	0	11	1761	14,602	3	46
1704	13,811	1	57	1733	21,420	1	57	1762	16,097	0	1
1705	12,070	1	17	1734	21,264	1	47	1763	17,082	3	21
1706	10,973	2	31	1735	24,416	1	28	1764	17,390	1	42
1707	12,962	0	16	1736	20,763	0	10	1765	18,132	1	4
1708	14,380	0	50	1737	26,605	1	38	1766	18,472	0	14
1709	13,338	1	48	1738	22,171	2	1	1767	17,087	3	5
1710	15,869	0	56	1739	18,594	3	28	1768	18,580	0	58
1711	15,481	2	14	1740	15,198	3	60	1769	18,371	2	30
1712	12,677	1	27	1741	17,178	1	3	1770	16,724	0	40
1713	15,937	1	8	1742	16,715	3	58	1771	16,874	2	12
1714	18,747	1	57	1743	17,655	0	34	1772	15,597	2	42
1715	21,751	0	9	1744	10,276	2	60	1773	16,431	3	20
1716	18,834	3	7	1745	16,034	1	34	1774	17,992	1	20
1717	22,260	3	58	1746	12,205	1	11	1775	17,736	0	13
1718	23,875	1	48	1747	14,560	2	32	1776	16,734	0	36
1719	25,510	2	13	1748	15,135	1	16	1777	18,217	2	60
1720	19,141	0	44	1749	21,555	0	35	1778	16,343	0	51
1721	25,263	0	45	1750	15,456	2	11	1779	12,760	2	10
1722	25,470	0	42	1751	14,788	0	2	1780	20,514	2	39
1723	22,415	1	1	1752	13,708	2	25	1781	13,311	3	20
1724	23,075	3	8	1753	18,857	0	20	1782	9,791	0	39
1725	24,722	3	35	1754	14,982	3	50	1783	13,624	1	51
1726	19,334	0	24	1755	16,544	2	22	1784	14,499	0	56
1727	21,064	3	61	1756	12,264	2	18	1785	14,807	1	27
1728	30,045	2	32	1757	14,050	2	30				

No. XX.

WINE of all kinds imported into GREAT BRITAIN, for Home Consumption and Exportation, and Receipts of Revenue thereon, from 1785 to 1834.

Year.	Imperial Gallons.	£	s.	d.	Year.	Imperial Gallons.	£	s.	d.
1785	3,420,318 5/6	Import and Export.			1809	5,808,087	2,361,113	18	3
1786	3,409,355*				1810	6,805,276	2,513,615	16	3
1787	4,898,225				1811	5,860,874	2,169,871	6	3
1788	5,368,300 5/6				1812	5,136,490	1,911,352	19	11
		For Home Consumption only.			1813	4,718,568	Records burned.		
					1814	4,941,663	2,032,840	19	4
1789	5,814,665	721,518	19	3	1815	5,968,435	2,095,299	18	0
1790	6,492,317	820,562	7	4	1816	4,420,807	1,610,299	5	8
1791	7,658,276	916,769	0	5	1817	5,614,622	2,023,720	8	2
1792	8,082,249	1,019,645	3	0	1818	6,139,490	2,241,380	2	7
1793	6,890,910	690,686	5	2	1819	4,978,600	1,802,097	1	11
1794	6,799,220	795,023	19	0	1820	5,019,960	1,818,396	2	5
1795	6,927,121	1,430,722	15	1	1821	5,016,569	1,797,491	7	10
1796	5,732,383	1,159,523	19	7	1822	4,975,159	1,794,013	11	2
1797	3,970,901	1,383,665	12	8	1823	5,291,410	1,907,466	13	3
1798	4,760,657	1,372,661	6	7	1824	5,479,732	1,967,953	13	10
1799	4,777,631	1,692,826	12	0	1825	8,655,993†	794,009	4	6
1800	7,728,871	1,697,213	8	5	1826	6,450,814	1,270,118	1	6
1801	7,006,310	1,922,987	9	11	1827	7,262,110	1,426,550	11	9
1802	6,355,749	1,931,872	19	9	1828	7,580,625	1,506,122	15	4
1803	8,181,466	2,141,356	12	9	1829	7,446,159	1,321,433	19	2
1804	4,840,719	1,814,323	5	5	1830	6,461,635	1,389,668	17	4
1805	4,565,551	2,003,866	8	4	1831	6,368,229‡	1,524,177	6	9
1806	5,936,235	2,320,428	11	8	1832	6,386,687	1,581,611	7	8
1807	5,922,337	2,334,197	18	9	1833	5,965,542			
1808	6,408,534	2,353,736	12	1	1834	7,526,967			

* Duty reduced in 1786 from £99 8*s.* 9 1/2*d.* per tun, in British ships, to £50 16*s.* 6*d.* on French wines, and from £49 14*s.* 4 6/20*d.* to £32 16*s.* 6*d.* on Portuguese and Spanish.

In 1803 an additional duty was imposed, when, exclusive of French wines, £1,230,724 was paid upon 49,230 tuns. In 1804 the consumption had fallen to 34,657 tuns, and the duties to £1,026,488, exclusive of French wines.

† In 1825 the duty was reduced on French wines to 6*s.* old wine measure, or 7*s.* 3½*d.* the imperial gallon. This was followed by a consumption the following three years, that increased the revenue £9,000 a year more than it had been at the high duty. Wine, too, was allowed to be imported in packages of any size. The reduction of revenue this year was owing to the allowance for stock on hand.

‡ The duty on French wine further reduced, and as well on all wines, except Cape wine, fixed at 5*s.* 6*d.* the imperial gallon. The duty on Cape not to take place until 1834, but it was raised 4*d.* per gallon.

No. XXI.

WINE of all kinds imported into IRELAND for Home Consumption, and Receipts of Revenue thereon, from 1789 to 1828.

Year.	Gallons.	£	s.	d.	Year.	Gallons.	£	s.	d.
1789	1,336,253	130,187	8	4	1809	1,264,926	324,889	10	5
1790	1,428,929	138,589	12	7	1810	1,020,275	272,971	12	7
1791	1,430,272	138,010	7	9	1811	894,792	263,136	8	5
1792	1,339,800	129,110	5	6	1812	892,946	278,065	7	4
1793	1,041,932	94,506	18	8	1813	760,004	253,765	1	6
1794	1,374,429	117,839	2	3	1814	636,137	234,736	7	3
1795	2,959,004	264,165	5	6	1815	730,351	293,091	11	3
1796	1,199,129	128,728	9	6	1816	439,602	167,158	2	0
1797	312,212	41,808	3	1	1817	571,596	200,891	11	11½
1798	1,558,265	184,489	12	6	1818	642,206	225,935	10	10½
1799	2,588,166	343,194	13	1	1819	589,854	203,261	19	7
1800	1,024,832	157,594	13	0	1820	508,501	169,421	5	5½
1801	1,245,742	192,663	18	4	1821	642,701	209,006	11	0
1802	2,130,350	348,199	14	9	1822	569,038	188,868	0	6½
1803	1,690,291	282,572	0	2	1823	547,218	180,764	16	11½
1804	1,708,510	327,132	13	10	1824	564,529	185,158	11	4
1805	981,690	251,927	19	3	1825	953,810	140,655	7	1¼
1806	1,053,979	254,102	7	8	1826	822,586	155,161	12	6½
1807	1,603,278	395,689	2	4	1827	929,619	174,036	16	7½
1808	1,189,716	294,736	14	9	1828	1,003,224	193,928	10	9

Notwithstanding the increase of population nearly to double, 333,029 gallons of wine less were drank in Ireland in 1828 than in 1789. Between 1791 and 1814 the duty was raised on French wines from £33 7*s.* per tun to £144 7*s.* 6*d.* and Portuguese and other wines from £22 4*s.* 8*d.* to £95 11*s.* The consequence was, that in 1824, the consumption had fallen to 564,529 gallons, and the revenue had only increased to £185,000 with a quadrupled duty!

No. XXII.

DUTIES ON WINES.

In 1272 the duties on wine were two shillings per tun, and the best came to the monasteries. This duty was called butterage. In 1618 wine was thirteenpence the full quart. A pint of Muscatel, sixpence. Two eight gallon rundlets of Claret, sixteen shillings. A bottle of Canary of nine pints, two and sixpence.

Three quarts of Sherry were sold for two shillings. Three quarts of white wine three shillings, being the vintner's prices.

Parliamentary papers of some standing show that down to the time of the revolution in 1688, or even a year or two subsequently, great quantities of French wine were imported, to the extent in some years of 20,000 tuns. The jealousy towards every thing French after that time, induced the laying on of enormous duties by legislators, who were not wise enough to reflect that those wines must have been exchanged for British commodities of one class or another. In 1693 the duties on French wines were increased 8*l.* per tun. In 1697, this duty was made 25*l.* more than on Portugal wines. Instead of two-fifths of all wine imported being French, as in 1669, the high duty had so driven it out of the market, that in 1784 only a thirty-fifth part was French. In 1697, the duty was 4*s.* 0½*d.* on French, and 1*s.* 8*d.* on Portuguese wine. In 1778 to 1806, French wine was raised from 6*s.* 3½*d.* the gallon to 11*s.* 5½*d.* duty, and Portuguese from 2*s.* 11¾*d.* to 7*s.* 7*d.* From 1770 to 1782 from sixty to ninety-six pounds were levied, while other wines only paid from thirty to fifty pounds. Those duties were reduced in 1786, but during the late war they were raised to 144*l.* 7*s.* 6*d.* on French, and 95*l.* 10*s.* on Portuguese, while German and Hungarian wines paid 118*l.* 13*s.* in British bottoms. In 1825 these absurd duties, which had acted most prejudicially to the revenue, and were unjust to the consumer as well as to trade, were reduced, and in 1831 finally settled at a duty of five shillings and sixpence a gallon upon all wines except Cape. The variation in these heavy duties was a proof how little reason and sound sense had to do with the enactment of them, seeing that whether French, Spanish, Portuguese, or any other wines were imported, they must be paid for in British manufactures, and what claim had the manufacturer of woollen over the maker of cotton goods, bar iron, silk, or steel ware?

The duty of 1713 was levied from 1726 to 1736, an average of ten years, on 23,109 tuns per annum, French, Spanish, German, and Portuguese wines alone, the population being about five millions; including other wines imported, 24,000 tuns may be reckoned as the importation, which would give a revenue of

576,000*l.* Now that of 1786, with duties from 32*l.* to 50*l.*, and 7,000,000 of population, only yielded 721,518*l.* 19*s.* 3*d.* Tripling the population of 5,000,000, the aggregate is 15,000,000, and tripling the duty at 24*l.*, we have 1,728,000*l.* being more than the revenue from wine in the last year, 1832, supposing the consumption had increased only in the same ratio, and the duties remained as in 1726. But the duty of 24*l.* was on French wines, Portuguese paid but 7*l.* 5*s.* 3*d.* per tun.

Madeira, until March 3, 1825, paid 9*s.* 2½*d.* the imperial gallon, after that time to 1831, 4*s.* 10*d.* Cape paid 3*s.* 0½*d.*, French wines 13*s.* 9*d.* Cape was then reduced to 2*s.* 3*d.* and French to 7*s.* 3½*d.* Rhenish wines paid 11*s.* 3½*d.* until 1825. In 1772, the cost of a pipe of port was 35*l.*; in 1815, it was 135*l.*

TABLE,

SHOWING THE FLUCTUATIONS OF WINE DUTIES AT ONE VIEW, BOTH OF THE CUSTOMS AND EXCISE, FROM 1786 TO 1832.

Years.	French.	Cape.	Madeira.	Portugal.	Spanish.	Rhenish.	Other Sorts.	Highest Receipts Revenue.
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	
1786	8 8¾	4 2	4 2	4 2	4 3	4 3	8 8¾	
1787	6 2½	3 6¾	3 6¾	3 6¾	3 6¾	4 10¾	4 6	848,909
1788	4 6	3 6¾	3 0	3 0	3 0	4 10¾	4 6	1,148,755
1795	7 4¼	5 5¾	4 10¾	4 10¾	4 10¾	6 9¾	6 4¾	1,694,888
1796	10 2½	7 4½	6 9¾	6 9¾	6 9¾	8 8½	8 3¾	1,288,252
1798	10 6½	7 6	7 1¼	6 11¼	6 11½	9 1	8 5½	2,124,808
1801	10 2½	7 4½	6 9¾	6 9¾	6 9¾	8 8½	8 3¾	2,185,661
1802	10 7¼	7 7	7 1¼	7 0	7 0	9 2	8 6	2,280,072
1803	12 5½	8 3	8 4	8 3	8 3	10 4	8 3	2,423,929
1804	13 6½	9 0	9 1¼	9 0	9 0	11 1¼	9 0	2,141,456
1805	13 8½	9 1¼	9 2½	9 1¼	9 1¼	11 3	9 1¼	2,255,794
1809	13 8½	9 1¼	9 2½	9 1¼	W. 9 1¼ / R. 10 3	11 3	9 1¼	2,686,003
1813	19 8½	3 0½	9 2½	9 1¼	All 9 1¼	11 3	9 1¼	No record.
1814	13 8½	3 0½	9 2½	9 1¼	9 1¼	11 3	9 1¼	2,267,578
1819	13 9	3 0½	9 2½	9 1¼	9 1¼	11 3½	9 1¼	2,005,359
1825	7 2½	2 5	4 9¾	4 9¾	4 9¾	4 9¾	4 9¾	934,665
1826	7 3	2 5	4 10	4 10	4 10	4 10	4 10	1,424,326
1831	5 6	2 9	5 6	5 6	5 6	5 6	5 6	1,535,484
1832								1,715,812

Nothing can more faithfully show the incapacity of the various judgments of the government than the above fluctuations. At a duty of 5*s.* 6*d.* there is a return to the revenue of 1,715,812*l.*, which a duty of 10*s.* 2½*d.* did not yield, nor of 13*s.* 9*d.* much exceed. From 1798 to 1814 were years of war, and the army and navy were largely supplied, and drawbacks allowed which do not figure above. It may be doubted whether 2,267,578 was not the maximum of revenue for home consumption, at the highest duty, the records of that year, 1813, being destroyed, and before Peel's Bill had struck down the value of all property twenty-five per cent. A revenue of 1,715,812 in 1832 is equal, from this lsat cause alone, to one of 2,267,578 in 1814.

CONSUMPTION OF WINE IN ENGLAND.

The consumption of wine in England for the undermentioned years was in proportion to the population :—

Year.	Population.	Old Gallons.		
1700	5,475,000	5,922,504	French, Spanish, Portuguese, & German, only.	
1750	6,467,000	3,894,912	Ditto. Duties being raised.	
1801	8,872,980	7,006,310	Of all kinds.	Imperial Gallons.
1811	10,163,676	5,860,874	Ditto.	Ditto.
1821	11,978,875	5,016,569	Ditto.	Ditto.
1832	13,889,675	6,386,687	Ditto.	Ditto.

Scotland for three periods.

Year.	Population.	Gallons.
1801	1,599,068	317,833
1811	1,805,688	340,247
1821	2,093,456	390,000

The duty in 1801 was 1,922,987*l.*, and in 1821, 1,797,491*l.*, with an increase of population in the latter year of 2,290,696. It is clear the people of England drank in 1700 three times as much wine in proportion as they do now. The natural consequence has been the increased consumption of spirits. From 1780 to 1830, the consumption of British made spirits increased from 873,840 gallons to 7,732,101, keeping pace with the increase of crime ; as if not only the temperature of the atmosphere, but the amount of misery, poverty, and crime, were to be guaged by alcohol. Ireland, in 1821, paid duty only on 2,649,570 gallons of home made spirits, but in 1828, no less

than 9,004,539! Even Scotland in 1784 distilled but 268,503 gallons of spirit, and in 1833 distilled 5,988,556. It is therefore, a fact, however much of an anomaly it may appear, that inebriety in this country has increased with the diminution of the wine consumption, and morals as well as health have suffered by the same decrease, and the augmented use consequently of ardent spirit.

The number of bottles of wine consumed daily in England, Wales, and Scotland, in 1821, being the average of three years, calculating four bottles to the old gallon, were :—

	England and Wales.	Scotland.	Total.
French	1,848	196	2,044
Cape	5,548	148	5,688
All other kinds	43,592	3,236	46,828
	50,980	3,580	54,560

No. XXIII.

WINE MEASURES USED BY DIFFERENT NATIONS.

		Gallons.	Litres.
Ahm	Hanover	41·095	155·552
Ditto	Rotterdam	39·993	151·380
Alma or meter	Constantinople	1·381	5·227
Almude	Oporto	6·731	25·480
Ditto	Faro	4·896	18·532
Ditto	Lisbon	4·370	16·541
Anker	Copenhagen	9·947	37·655
Ditto	Pernau	10·233	38·736
Ditto	Revel	11·172	42·276
Ditto	Riga	10·333	39·097
Ditto	Rastock	9·562	36·199
Antheil	Hungary	13·350	50·534
Asnée	Lyons	21·809	82·549
Arroba	Canaries	4·245	16·073
Ditto	Spain	4·245	16·073
Ditto	Valencia	3·112	11·786
Ditto	Malaga	4·186	15·850
Barrique	Limoux	31·695	120·000
Ditto	Rhone	31·695	120·000
Ditto	Basses Pyrénées	79·239	300·000
Ditto	Rouen	51·688	195·648
	Rochelle	46·039	174·279
	Nantes	63·405	240·000
	Bordeaux	60·748	229·937

(*continued*)

		Gallons.	Litres.
Barile	Corfu	18·000	68·133
Ditto	Naples	11·013	41·685
Ditto	Florence	12·042	45·584
Ditto	Bastia	36·986	140 000
Ditto	Genoa	19·610	74·225
Ditto	Leghorn	12·042	45·584
Ditto	Ragusa	20·363	77·075
Ditto	Rome	15·413	58·341
Ditto	Zante	17·625	66·707
Bareile	Rhône Department	63·390	240·000
Berg Eimer	Ratisbon	23·196	87·812
Both	Germany	126 000	477·036
Botte	France	112·519	426·000
Brenta	Milan	18·865	71·405
Ditto	Verona	19·199	72·337
Ditto	Bergamo	19·223	72·761
Cantara	Alicant	3·052	11·554
Ditto	Arragon	2·724	10 313
Ditto	Oviedo	5·098	19·286
Carabus	Persia	7·500	27·877
Carga	Barcelona	32·695	123·756
Corba	Bologna	19·493	73·782
Cuba	Abyssinia	0·268	1·016
Cusa	Cyprus	2·633	9·967
Eimer	Breslau	14·670	55·532
Ditto	Dresden	17·870	67·639
Ditto	Erfurt	19·040	72·072
Ditto	Hungary, Higher	19·368	73·316
Ditto	Ditto, Lower	15·030	56·892
Ditto	Leipsic	20·102	76·099
Ditto	Munich	9·750	37·020
Ditto Visiermass	Nüremburg	17·959	67·984
Ditto Schenkmass	Nüremburg	16·761	63·439
Eimer	Prague	16·950	64·167
Ditto	Prussia	18·145	68·690
Ditto, Great	Ratisbon	30·014	113·620
Eimer	Vienna	14·942	56·564
Ditto	Russia	3·250	12·249
Fuder or Stuckfash	Germany	252·000	954·072
Gallon	England	1·000	3·786
Ditto	France	1·003	3·804
Ditto	Ireland	0·942	3·565
Garniec	Poland	0·419	1·590
Gerra	Minorca	3·187	12·063
Hectolitre	France	26·419	100·000
Kanne	Sweden	0·691	2·615
Leager	India, Ceylon	150·000	606·080
Lot	Dunkirk	0·608	2·302
Ditto	Lisle	0·545	2·064

(*continued*)

		Gallons.	Litres.
Mass	Augsburg	0·391	1·479
Ditto	Shaffhausen	0·346	1·311
Ditto	Berne	0·441	1·671
Maas	Heidelberg	0·607	2 300
Ditto	Mayence	0·493	1·868
M. Land	Zurich	0·481	1·823
M. City	Zurich	0·433	1·642
Madida	Brazil	0·700	2 651
Mastello	Ferrara	14·630	55·378
Millerolle	Marseilles	16·990	64·330
Moyo	Gallicia	42·798	161·991
Ohm	Basil	13·215	50·026
Ditto	Sweden	36·700	139·019
Ditto	Dantzic	39·572	149·756
Ditto	Strasburg	12·176	46 093
Orna	Trieste	14 942	56·564
Oxhoft	Oldenburg	65 930	249·558
Ditto	Libau	62·487	236·458
Pint	Scotland	0·447	1·694
Quartlin	Cassel	2·160	8·175
Quartant	Marne	23·789	90·057
Ditto	Burgundy	27·161	102·822
Quart	Lindau	0·606	2·294
Ditto	La Nievre	30·375	115·000
Quartin	Majorca	7·168	27·131
Rubbio	Turin	2·480	9·389
Ditto	Nice	2·076	7·857
Salma	Messina	23·079	87·360
Secchio	Venice	2·853	10 800
Setier	Geneva	11·948	45·224
Soma	Ancona	22·698	85 917
Stoff	Königsburg	0·378	1·433
Stoopen	Antwerp	0·726	2·748
Stekan	Amsterdam	5·126	19·403
Stubgen	Bremen	0·842	3·187
Ditto	Brunswick	0 969	3·669
Ditto	Stralsund	1·027	3·883
Ditto	Zell	1·025	3·883
Vat	Netherlands	26·419	100 000
Vedro	Russia	3·246	12·289
Viertal	Copenhagen	2 041	7·726
Ditto	Lubec	1·913	7·241
Ditto	Osnaburg	1·290	4·883
Ditto	Wismar	1·913	7·241
Ditto	Frankfort	1·948	7·373
Ditto	Cologne	1·580	5 980
Velte	France	2·017	7·609
Ditto	Bordeaux	1·896	7·177
Ditto	Bayonne	1·952	7·390

Besides the above, which are generally used for wine measures alone, the following are frequently applied to the same purpose.

	Cubic Inches.	Number equivalent to 100 Gallons English.	
Azumbre	118⅜	195·14	Used in Spain.
Quartillo	29⅝	784·40	Ditto.
Quartilla	185	124·86	Ditto.
Libra	2⅜	780·40	Ditto.
Cantara	775⅝	29·78	Ditto.
Schoppen	29⅜	780·40	Used in Strasburg.
Kanne	159⅜	144·71	—— Sweden
Mataro	1,375	16 80	—— Italy.
Metaro	577½	40·00	—— Tunis.
Basso	275¾	83·77	—— Verona.
Moggio	6,789	3 40	—— Mantua.
Quartillo	349½	66·09	—— Minorca.
Stof	78⅜	293·90	—— Narva.
Aliquer	675¾	34·18	—— Oporto.
Pint	116	199·14	—— Prague.
Boccale	79⅛	289·47	—— Rome.
Kraska	93⅞	246·07	—— Russia.
Cassise	675	33·24	—— Sicily.
Neessal	44¾	516·20	—— Stettin.

The following national wine measures, in a connected form, will not be misplaced here.

SPAIN.

At Cadiz the cantaro is 8 azumbres, or 32 quartillos. The large arroba is 4¼ gallons, the small 3¾.

16 Arrobas make 1 mayo
27 Ditto 1 pipe
30 Ditto 1 botta

The botta is 127½ English wine gallons: the Spanish pipe 114¾.

PORTUGAL.

At Figueras the Almude is equal to 5¾ gallons
At Vianna to 6½ ditto

21 Almudes of Oporto make a pipe; at Lisbon 31 almudes. At Lisbon 2 potes are equal to 12 canadas, or 48 quartillos: 18 almudes make a baril: 52 almudes make 1 tonnelada, or 277¼ gallons.

SWEDEN.

2 Stoope make	1 kanne	2 oxhoft 1 pipe
15 kannes	1 anker	1 pipe is $124\frac{1}{2}$ gallons
2 ankers	1 eimer	1 ahm is $41\frac{5}{12}$ ditto
2 eimers	1 ahm	100 kannes are $69\frac{1}{5}$ gallons.
$1\frac{1}{2}$ ahm	1 oxhoft.	

RUSSIA, PETERSBURGH.

11 Tsharky make	1 krashka	$13\frac{1}{2}$ bottles make	1 vedro
8 krashka	1 vedro	3 vedros	1 anker
40 vedros	1 sorokovy	6 ankers	1 oxhoft
		2 oxhofts	1 pipe

The vedro is not quite equal to 3 gallons.

RUSSIA GENERALLY.

1 Garnetz	= 0·72123 English gallons.
1 Vedro	= 2·7048
1 Tschetvrick	= 5·7698
1 Osmine	= 23·079
1 Tschetvert	= 46·159
1 Last	= 738·54

GREECE.

Wine is generally sold by the oke, 45 of which make $127\frac{1}{3}$ lb. avoirdupois: hence the oke is 2lb. 2 oz. 5 drachms of that weight.

ITALY.

At Trieste, 40 boccali are equal to 15 gallons. At Venice the anfora = 4 bigonzi, or 8 mastelli, or 48 secchii, or 192 bozze, or 768 quartuzzi. The anfora is 137 English gallons. At Genoa, 100 pinte = 1 barilla; 2 barilla = 1 mezzarolla, or $39\frac{1}{4}$ gallons English.

GERMANY.

At Hamburgh, the ahm is $38\frac{1}{4}$ gallons, and the fuder $229\frac{1}{2}$. The ahm is 5 tierces; a fass = 4 oxhoft or 6 tierces. The oxhoft varies in quantity.

HOLLAND, AMSTERDAM.

Stoop = $5\frac{1}{8}$ pints.
100 mingles = 32 common or $26\frac{2}{3}$ imperial measure.
Dutch ahm = 41 gallons.

DENMARK.

4 ankers an ahm		= $37\frac{3}{4}$ English gallons.
Copenhagen anker		= 9·947 English gallons.
100 pots	-	= $25\frac{1}{2}$ gallons.
Oxhoft	-	= 58 gallons.
Fuder	-	= 930 pots.

CYPRUS.

1 Jar is 5 Florence bottles.
4 jars a barrel.
4 barrels a load.
Cyprus wines are exported in casks of 70 jars.

CAPE OF GOOD HOPE.

1 Flask $\frac{19}{32}$ gallons, or 4·946 imperial.
1 anker $9\frac{1}{2}$ ditto, $7\frac{9}{10}$.
1 aum 38 ditto, $31\frac{2}{3}$.
1 legger 152 ditto, $126\frac{7}{11}$.
A pipe is 110 gallons, old measure, or 91 $\frac{7}{11}$ imperial.

It is to be hoped, that, in process of time, a greater uniformity in weights and measures may prevail among civilized nations. Nothing but inexcusable negligence prevented one British imperial gallon and four French litres from being made equal, as the former differs so slightly from the latter. This, at least, would have made uniform the liquid measures of the two most civilized European nations.

The wisdom of reckoning liquid quantities by a medium standard, instead of the old method of tuns, hogsheads, and so forth, need not be commented upon; it is gratifying to see that the Custom-House returns are made in imperial gallons only.

No. XXIV.

Tuns.	Pipes	Puncheons.	Hogsheads	Tierces.	Imperial Gallons.	Gallons.	Quarts.	Pints.	French Litres.
1	2	3	4	6	210	252	1008	2016	954·0720
	1	1½	2	3	105	126	504	1008	477·0360
		1	1⅓	2	70	84	336	672	318·0240
			1	1½	52½	63	252	504	238 5180
				1	35	42	168	336	159 0120
					1	1·20	4·80	9·60	4·5444
						1	4	8	3·7860
							1	2	·9465
								1	·4732

STANDARD GUAGE FOR FOREIGN WINES.

	Old Gallons.	Imperial Measure.
Pipe Carcavellos, Lisbon, Bucellas	140	116·63540
Pipe of Port.....	138	114·96918
—— Madeira	110	91·64210
—— Vidonia	120	99·97320
Butt of Sherry.....	120	99·97320
—— Mountain....	126	104·97186
Hogshead of Claret..	57	47·48727
———— Tent ..	63	52·48593
Ahm, Rhenish.....	36	29·99196
—— Cape	20	16·66220

The tun is decimally 209·94372, imperial measure.
The pipe, 104·97186.
The puncheon, 69·98129.
The hogshead, 52·48593.
The tierce, 34·99062.
The gallon, ·83311.
The old gallon is 231 cubic inches, or 3lb. 5oz. 6¼dwts. avoirdupois weight.

No. XXV.

OLD WINE GALLONS, WITH THEIR EQUIVALENT IN IMPERIAL GALLONS, FROM 1 TO 100.

For common purposes, the old gallon multiplied by 5, and divided by 6, will answer very well: the present table will be available where the nicest calculation is demanded.

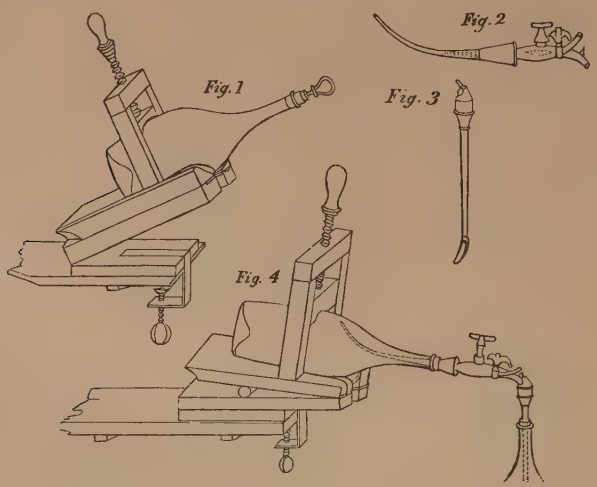
1	0·83311	26	21·66088	51	42·48866	76	63·31643
2	1·66622	27	22·49399	22	43·32177	77	64·14954
3	2·49933	28	23·32711	53	44·15488	78	64·98265
4	3·33244	29	24·16022	54	44·98799	79	65·81576
5	4·16555	30	24·99333	55	45·82110	80	66·64887
6	4·99867	31	25·82644	56	46·65421	81	67·48198
7	5·83178	32	26·65955	57	47·48732	82	68·31509
8	6·66489	33	27·49266	58	48 32043	83	69·14820
9	7·49800	34	28·32577	59	49·15354	84	69·98152
10	8·33111	35	29·15888	60	49·98665	85	70·81443
11	9·16422	36	29·99199	61	50·11976	86	71·64754
12	9·99733	37	30·82510	62	51·65288	87	72·48065
13	10·83043	38	31·65821	63	52·48599	88	73·31376
14	11·66354	39	32·49133	64	53·31910	89	74·14687
15	12·49665	40	33·32444	65	54·15221	90	74·97998
16	13·32976	41	34·15755	66	54·98532	91	75·81309
17	14·16287	42	34·99066	67	55·81843	92	76·64620
18	14·99608	43	35·82377	68	56·65154	93	77·47931
19	15·82919	44	36·65688	69	57·48465	94	78·31242
20	16·66222	45	37·48999	70	58·31776	95	79·14554
21	17·49533	46	38·32310	71	59·15087	96	79·97865
22	18·32844	47	39·15626	72	59·98398	97	80·81176
23	19·16155	48	39·98932	73	60·81710	98	81·64487
24	19·99466	49	40·82243	74	61·65021	99	82·47798
25	20·82777	50	41·65555	75	62·48332	100	83·31109

No. XXVI.

INSTRUMENT REFERRED TO, Page 46.

The outline below is very simple. The object is to decant the wine without the smallest disturbance. The instrument being firmly screwed to a table, is elevated or depressed by moving forward or backward a circular bit of wood, the end of which is seen in Fig. 4. The corkscrew and vice, Fig. 1. explain themselves. The tubes which are introduced into the bottles are more complicated. Fig. 3. is little other than a prolonged funnel, the lower end bent as wine funnels are in general. The

top is capped, and only a small opening is left for the introduction of Fig. 2. This last being inserted in the bottle to be decanted, as shown in the sketch below; the large end has a forked and curved tube to be placed in the orifice of Fig. 3. over which is a little ring to receive a pointed knot on Fig. 2. and keep it in its place; the cock in the neck of the upper tube is turned, and the air entering by the second fork of the tube curved upwards, fills the vacant space as the wine flows out. A second cock closes the tube which enters the empty bottle, should it be of smaller size than that holding the wine, and danger of an overflow be apprehended. Both these instruments fit the bottles hermetically, by means of their conical shape, near the upper end, almost close to which, in the lower part of the tube, some small holes are made in the upper side of the tube, to take off the last of the wine in the bottle's neck, see Fig. 2.



No. XXVII.

REGULATIONS OF THE CUSTOMS.

Wine must be imported in vessels of 60 tons or upwards.

Wine must be imported, for home consumption, in British ships, or those of the country in which the wine is grown, or of the country from which it is exported.

Wines of France, Spain, Germany, Portugal, Canaries, Madeira, and the Western Islands, imported in foreign ships to be alien goods, and pay port and town dues.

No abatement to be made on account of damaged wine.

Wine from the Cape must have a certificate of its production.

By the Act *9th Geo.* IV. *cap.* 76, wine is permitted to be imported in any sized package, and the duties on bottles are reduced to one-fourth, and from British possessions to 8*d.* per dozen.

No. XXVIII.

ALCOHOLIC STRENGTH OF WINES AND LIQUORS, AFTER MR. BRANDE, EXCEPT THOSE IN ITALICS.

This must be regarded only as an approximation to the mean alcoholic strength of wines and liquors, for it is obvious that there will be so great a difference produced by the nature of the fruit and the season, as well as by the fermentation and the alcohol evolved, that no wine from the same vineyard will exactly agree for two successive years. Analyses for seven years, and then registering the mean, would be desirable. No doubt many of these wines received additions of brandy, and were not pure. Genuine wine carefully obtained, and thus analyzed, would afford something of a test to detect the brandy introduced on importation. Portugal and Sicilian wines are always brandied, the latter without discretion and with bad brandy.

	Pure Alcohol per cent.
Burgundy, average of four samples	14·57
Ditto, lowest of the four	11·95
Ditto, highest of ditto	16·60
Champagne, four samples; average	12·61
Ditto, still	13·80
Ditto, mousseux	12·80
Côte Rôtie	12·32
Frontignan	12·79
Red Hermitage	12·32
Sauterne	14·22
Lunel	15·52
White Hermitage	17·43
Vin de Grave	13·94
Ditto, second sample	12·80
Barsac	13·86
Rousillon	19·00
Ditto, second sample	17·26
Claret	17·11
Ditto	16·32
Ditto	14·08
Ditto	12·91
Average	15·10
Grenache	21·24
Malaga, 1666	18·94
Ditto	17·26
Sherry; average of four kinds	19·17
Teneriffe	19·79
Vidonia	19·25
Alba Flora	17·26
Tent	13·20
Hockheimer	14·37
Ditto	13·00
Ditto, old	8·88
Rüdesheimer, 1800	12·22
Average of ten kinds by Ziz and Prout	11·46
Colares Port	19·75
Port; average of seven specimens	22.96
Lisbon	18·94
Carcavellos	19·20
Ditto	18·10
Bucellas	18·49.
Madeira Malmsey	16·40
Ditto, red	22·30
Ditto	18.40
Madeira	24·42
Ditto	23·93
Sercial	21·40
Ditto	19·41
Average	22·27
Marsala; average of two specimens	25·09
Lacryma Christi	19·70
Lissa	26·47
Ditto	24·35
Syracuse	15·28
Etna	30·00
Aleatico	16·20
Constantia, white	19·75
Ditto, red	18·92
Cape Muscat	18·25
Ditto Madeira	22·94
Average of three samples	20·51
Shiraz, *white*	19·80
Ditto, *red*	15·52
Tokay	9.88
Nice	14·63
Raisin wine	26·40
Average of three specimens	25·12
Currant wine	20·55
Gooseberry	11·84
Orange; average of six samples	11·26
Elder wine	9·87
SPIRITS.	
Scotch Whiskey	54·32
Irish ditto	53·90
Rum	53·68
Brandy	53·39
Gin	51·60
Cider, 9·87 & 5·21 average	7·84
Perry; four samples	7·26
Mead	7·32
Burton Ale	8·88
Edinburgh	6·20
Dorchester	5·56
London Porter	4·20
Brown Stout	6·80
London Small Beer	1·28

The following is another statement, upon what authority is unknown. It will be seen that it differs from the former.

A bottle of Port, of 26 oz., seven years in glass, gave 2 oz. 7 dchms. of pure alcohol.

Ditto, 25½ oz., one year in bottle, and two in wood, 2 oz. 6 dchms. ditto.

Ditto pale Sherry, 25 oz., and three years' old produced 3 oz.

Ditto Madeira, 25½ oz., two years' old, produced 2 oz. 5 dchms.

Ditto Cape, 25 oz., one year old, produced 2½ oz.

Ditto old Hock, 21 oz., produced nearly 1 oz.

Ditto Brandy, 24 oz., produced 10 oz.

Ditto Rum, 24½ oz., produced 9½ oz.

Four bottles of Port, Sherry, or Madeira, contain somewhat more spirit than a bottle of Brandy.

Three bottles of Sherry are about equal to a bottle of Rum.

Ten bottles of Hock are about equal to one of Brandy.

Port Wine contains in the residuum an astringent extract, and more tartaric acid than Madeira, and Sherry less than either. The preference given to Port, on account of its astringency, is objectionable on account of its tartaric acid, causing indigestion and irritability of the viscera. Sherry appears better fermented, and freer from the acid and saccharine matter on that account, and therefore preferable where such irritability is observable.

No. XXIX.

LIST of some of the various LIQUORS in use among MODERN NATIONS besides WINE.

Name.	Country.	From what extracted or distilled.
Brandy, *eau de vie*	France	Grapes, potatoes, corn, cider and perry, plums, cherries, residue of the brewhouses, &c.
Aguardiente	Spain	Generally from the grape, and of tolerable quality.
Geneva	Holland	From corn, flavoured with juniper in rectification.
Troster	Germany	Distilled from the murk, fermented with ground rye or barley.
Mum	Brunswick	Fermented wheaten malt, and oatmeal, with fir rind; lops of fir and beech, and variety of herbs..
Mariskino	Zara	Distilled from the cherry.
Rakia	Dalmatia	Grape murk, and aromatic herbs distilled.
Goldwasser	Dantzic	Distilled from corn and other substances; sometimes called *eau de vie de Dantzick*, named from having gold leaf floating in it.

(*continued*)

Name.	Country.	From what extracted or distilled.
Rosolio		Brandy, sugar, cinnamon, and cloves distilled.
Snaps	Denmark	A brandy, distilled from rye and barley, sold in shops.
Birch wine	Norway	Made of the juice of the birch tree, boiled and fermented.
Brandy	Sweden	Distilled from corn and the black ant; a powerful spirit.
Ditto	Russia	Ditto, from corn.
Braga		Ditto, from oatmeal and hops; a white liquor.
Mead		Honey, beer-lees, and kalatsch fermented.
Quass		Barley-malt, rye-malt, oatmeal, fermented and made acidulous.
Kisslyschtxhy		Differently prepared with the preceding, being rye meal and water alone.
Schara	The Calmucks	A beer resembling Braga, but different in colour.
Arraki	Hill Tartars	Prepared from sloes and numerous wild berries.
Busa		A beer brewed from ground millet.
Raka	Kamtschatka	Distilled from a sweet grass, called Slatkaia-trava, with certain berries to flavour.
Muchumor		Made from a red mushroom of the country.
Zythum	Syria	Beer fermented from the grain of the country.
Araki	Egypt	Distilled from dates.
Carmi		A species of beer.
Sherbet	Turkey	Sugar, lemon juice, apricots or plums, and flavoured with some sweet flower.
Bouza	Nubia	Beer prepared from barley, previously roasted.
Palm wine		Prepared as in other places, from the tree of that name.
Mead	Ethiopia	Prepared from honey, barley, and a root called taddo.
Pitto	Dahomey	Prepared from grain on the coast.
Milaffo	Congo	Prepared from the palm tree.
Guallo		Prepared from Indian wheat.
Pombie	The Caffres	Fermented from millet, or Guinea corn.
Mahayah	Morocco	Distilled from figs.
Lotus wine	Tripoli, interior	Made from the *Rhamnus Lotus* or tree of the food of the ancient Lotophagi.
Usuph or Usaph	Barbary	Raisins and water prepared.
Boza	Constantinople	Superior to that of Nubia, of similar materials.
Brandy	Persia	Distilled of very good quality, from the grape at Shiraz; sold by weight.
Airen	Tartary	Cows' milk made into a drink like koumiss.
Koumiss		Mares' milk fermented; a strong drink called arika is frequently distilled from it.

(*continued*)

Name.	Country.	From what extracted or distilled.
Mandrin	China	A superior rice wine. The lees distilled yield a brandy called *show-choo*, or *sam-su*.
Tar-a-sun		A beer from barley or wheat.
Lamb wine		Lambs' flesh, mashed with milk, or with rice, and fermented.
Cha		Palm wine.
Rum	India	From jaggory, a kind of molasses from the sugar cane.
Tári	Ditto	Palm wine, when distilled affords arrack; hence the English word toddy. The wine of the wild date is called *Sindag* in the Carnatic Hindu, in the Teling and Zamul *Callu*.
Mahwah Arrack .		Made of Madhuca flowers (*bassia butryacea*).
Toddy	Ceylon	Distilled from the cocoa tree.
Phaur.....	Nepaul	Distilled from wheat or rice.
Sihee		Prepared from the grape, in two modes.
Sihee	Afganiston	A drink from sheep's milk fermented.
Lau	Siam and the Birmans	Generally prepared from rice.
Soura, or Taury..	Nicobar Islands	Fermented palm juice.
Ki-ji, Tan-po, Si-chew	Java	Three different strengths of distilled rice, or of arrack.
Bâdek and Brom.	Ditto Natives	Rice boiled, and stewed with *razi* or onions, black pepper, and capsicum, made into cakes, and sold as a ferment. Brom is a different preparation of the same substances.
Brum.....	Sumatra	Nearly the same as the Java brom.
Kokemar	Persia	Poppy seeds in decoction, drank hot.
Paniz	Corea	From a grain, supposed to be a coarse kind of rice.
Sacki	Japan	A beer from fermented rice.
Awamuri	Japanese Islands	A drink from corn and different fruits fermented.
Sagwire	Celebes	A strong species of palm wine.
Tuba	Manilla Isles	From a species of palm.
Kava	Friendly Isles	A species of pepper plant chewed by the women, and their saliva collected and diluted with water.
Ava	Otaheite	A root which is bruised or baked before infusion: the liquor very intoxicating.
Y-wer'a	Sandwich Islands	A spirit like whiskey, but less strong; from the *tea* root.
Peach Brandy	United States of America	The peaches are treated as similar fruits in Europe.
Brandewyn ..	Cape of Good Hope	A bad brandy, distilled from the husks and stalks of the grapes and wine lees.
Rum	The West Indies	Distilled from molasses.
Tafia	Ditto	A poor kind of rum.

(*continued*)

Name.	Country.	From what extracted or distilled.
Piworree, or Ouycon.....	Guyana	Prepared from the cassava, resembling beer. Cakes of cassava made about ¾ of an inch thick, are baked until they are brown throughout. Women then moisten their mouths with a little water and chew a piece of bread until it is perfectly saturated with saliva. They then strain it in their mouths, and spit out the saliva into a vessel in the centre. When a sufficient quantity of this extract is made, they add water to the extent of 200 gallons or more, leave it to ferment until sour, and then drink it.
Pulque	Mexico	The juice of the agave fermented; a strong spirit is also made from it, called Aguardiente de Magney.
Chica		Beer made from maize by the Indians.
Masato		A drink from the roots of the manioc, or yucca.
Grape.....	Brazil	Black sugar, water, and the leaves of the akaja tree to make it intoxicating.
Aipy		Prepared from the aipimakakara, a species of manioc.
Kaviaraku		The preceding, before fermentation.
Kooi		Prepared of the akajèe apple.
Vintro da Batatas.		Prepared from the batata root.
Brandy	Portugal	Distilled pure and good; also often from damaged figs and raisins; some kinds are bad in quality.
Gin, or British Brandy	England	A pure spirit, distilled from corn, but too fierce to be sold alone, and therefore reduced and rectified, or rather adulterated, with turpentine, juniper berries, nitre, or prunes.
Porter, Beer, Ale, &c.....		Fermented from malt and hops.
Whiskey.....	Ireland and Scotland	Distilled from corn, a pure spirit.

INDEX OF WINES.

A.

Abasas, 230
Abrio, 160
Absac, 142
Adenas, 120
Agros, 268.
Ahr, 212
Aiguillon, 164
Ajaccio, 178
Albano, 245
Alba Flora, 195
Albi, 126
Aleatico, 246. 249. 251
Alenquer, 230
Aleyor, 195
Alicant, 185
Allassac, 171
Aloxe, 100. 104
Altenahr, 211
Altkirch, 169
Ambes, 146
Ambonnay, 76
Amontillado, 193
Ampuis, 121
Annay, 108
Antella, 249
Arbois, 53. 173
Arcetri, 249
Arcins, 150
Argeles, 140
Argentac, 171
Argentière, 124
Arjuzanx, 176
Arsac, 150. 152
Arsures, 173
Artiminio, 249
Asmannshäuser, 211
Asprino, 245
Asque, 146
Asti, 251
Astracan, 273
Aubiac, 144
Aubigny, 92
Augenscheimer, 202
Augusta, 252
Ausbruch, 254
Aussac, 127
Auxerre, 106
Avenay, 94
Avensan, 150. 152
Avize, 79
Avola, 377
Ay, 75
Azy, 92

B.

Bacharach, 210
Bacalan, 146
Badenweiler, 212
Bagnères, 140
Baia, 244
Baixas, 138
Ballan, 172
Banal Busa, 195
Banylus, 134
Bar sur Aube, 93
Bar, 165
Barbe Blanche, 143
Barolles, 120
Barsac, 156
Bas Medoc, 152
Bassens, 145
Bassieux, 120
Bastia, 178
Batard Mont Rachet, 12. 101
Baurech, 145
Bazas, 144
Beaumont, 94
Beaune, 72. 97, 98, 99, 100
Beausoleil, 127
Beautran, 146, 147
Becherbach, 212
Begadan, 152
Bellecave, 161
Beni Carlos, 154. 185. 216
Berchetz, 259
Bergerac, 159
Beru, 109
Bessas, 114
Bessingheim, 212
Bèze, 98
Beziers, 130
Bianillo, 251
Biella, 251
Birthalmen, 258
Bischeim, 211
Bischillatto, 251
Blaie, 120
Blaignau, 152
Blanchot, 107
Blandans, 173
Blanquefort, 149
Blanquette de Calvisson, 123
——— de Limoux, 128
Blaye, 142
Blére, 172
Blischert, 211
Blood Wine, 214
Bodenheim, 377
Bodendorf, 204
Boivins, 107
Bommes, 155, 156
Bons Côtes, 159
Borderie, 160
Borja, 185
Bostandschi-Oglu, 273
Boudon, 127
Bouillac, 145, 146
Bourg, 142
Boursalt, 79
Bouscat, 147
Boussicat, 107
Bouzy, 76
Branne, 142
Branne Mouton, 159. 358.
Brauneberger, 202. 212.

Brède, 147
Brézème, 114
Brouilly, 120
Bruges, 147
Brunetière, 160
Bucellas, 230
Buda, 257
Bussy, 165

C.

Cabinet, 209
Cabrides, 129
Cadillac, 145
Cagnes, 131
Cahors, 53. 58. 163, 164
Calabria, 244
Calabrian, 42
Calhota, 236
Calmus, 212
Cambes, 145
Camblanes, 145, 146
Campsas, 127
Canary, 196
Cantenac, 150
Carabons, 165
Carbezon, 186
Carbonieux, 156
Carcassone, 128
Carcavellos, 230
Carigliano, 245
Cariñena, 186
Carmignano, 249
Cape Breton, 175
Cape of Good Hope, 291
Cape Corsica, 178
Cashmere, 283
Castelnaudary, 128
Castelnau, 149. 152
Castelmoron, 164
Castel Sarrasin, 127
Castiglione, 247
Castillon, 142
Castres, 147
Cauderan, 147
Caudrot, 144
Caumont, 121
Causses, 164
Caunonao, 251
Cenon, 143, 144, 145
Cephalonia, 271
Cerigo, 271
Cerons, 156
Chablis, 107
Chabrières, 177
Chacoli, 186
Chainette, 106
Chaintre, 110
Chalais, 161
Chambertin, 98
Chambolle, 98
Champagne, 4. 58. 72
Champeau, 107
Champgchot, 108
Champigney, 161
Champillon, 95
Chanos-Curson, 114. 117
Chapelle de Bois, 113
Chapitre, 98
Chapotte, 107
Charnay, 110
Chassagne, 101. 104
Chassagny, 120
Chateâu Neuf, 121
——— Châlons, 172
——— Chinon, 162
——— Haut Brion, 147
——— Lafitte, 151
——— Latour, 151
——— Lamont, 156
——— Margaux, 150, 151
——— Thierry, 92
Chavost, 79
Chaudière, 129
Chenôve, 98. 105
Chénas, 317
Chesnas, 120
Chevalier Mont Rachet, 12. 101
Chianti, 249
Chiavenna, 213
Chigny, 77
Chouilly, 79
Chusclan, 123
Cissac, 152
Civrac, 152
Clairac, 164
Clairet, 53. 121. 175. 250
Clairion, 106
Clamecy, 162
Claret, 64. 320
Clavoyon, 101
Claux Cavalier, 122
Clos-Bernardon, 98
—— Tavannes, 101
—— Pitois, 101
Closet, 94
Colares, 230
Collioure, 134
Commandery, 265. 267
Condrieu, 119
Constantia, 288
Conflans, 162
Coquempin, 213
Cornolas, 123
Corregliano, 259
Cornas, 125
Corton, 100
Corfu, 271
Corte, 178
Costière, 122
Côte-à-bras, 76
Côte Rotie, 119
Côte des Chanoines, 166
Côteau Brûlé, 359
Cotnar, 259
Coulanges, 113
Coutras, 142
Couture, 161
Crâmant, 79
Creuze Noire, 110
Crimea, 273
Crose, 114, 117
Croissy, 79
Cully, 214
Cubsac, 146
Cuis, 79, 80
Cumel, 121
Cumières, 75
Cunac, 126
Cusel, 212
Cussac, 150
Cyprus, 37. 52. 264

D.

Damery, 78. 95
Dannemoine, 113
Danzenac, 170
Dariste, 149
Davaye, 109
Deidesheim, 208
Desales, 214
Die, Clairette de, 118
Dissay, 161
Dizy, 75
Dulamon, 149

E.

Ecueil, 94
Epernay, 71. 78
Epineuil, 113
Epstein, 212
Erbach, 203
Erdo Benye, 256

Erlach, 214
Erlon, 254
Essone, 92
Essoyes, 93
Etandes, 108
Etna, 252
Etoile, 172
Eysines, 147

F.

Fabas, 127
Fagaa do Pereira, 236
Faro, 252
Farcies, 160
Fargues, 155
Figueras, 338
Finckenwen, 170
Fixin, 105
Fixey, 105
Fley, 109
Fleury, 79. 113
Fleurie, 120
Floirac, 145
Florence, 247
Fondellol, 185
Fran, 127
Fronsadais, 142
Frontignac, 2. 129
Frontenay, 173
Frontignat, 164
Fuençaral, 186
Fuissé, 110
Fumel, 164

G.

Gaillac, 126
Gaillau, 152
Galafura, 230
Gallée, 120
Gan, 139
Gannat, 177
Garigues d'Avignon, 121
——— Sorgues, 121
——— Orange, 122
Garnaccia, 251
Gaubischeim, 208
Gaye Sicabaig, 139
Geissenheim, 211
Genevrières, 100
Georgia, 275
Gervans Rouge, 117
Gevray, 105
Giberwein, 258
Gierace, 244
Giro, 251
Girolles, 108
Givry, Clos de, 108
Gorce, 159
Gorvaens, 230
Goutte d'Or, 100
Graach, 212
Gradignan, 147
Graefenberg, 209
Graves, 146
Grauve, 80
Gravilliers, 93
Gravières, 101
Grenache, 122. 133. 138
Grenet, 143
Grenouille, 107
Grimard, 165
Grise, 109
Groswarden, 257
Gruenhaeuser, 202. 211
Guben, 213
Guinchay, 110
Guindre, 187
Guitres, 142
Gyængyæsch, 257
Gyorgy, 257

H.

Hannibal's Camp, 123
Haut Medoc, 152
Haut Brion, 147
Hautvilliers, 75
Hermitage, 39. 53, 54. 114. 154.
Hock, 4. 6
Hockheimer, 202. 205. 209. 211.
Hospital, 186. 214.

I.

Iles, 107
Illats, 156
Imola, 246
Irancy, 113
Ison, 146
Ispahan, 278

J.

Jau, 152
Jaulnay, 161
Jenorodi, 271
Johannisberger, 202. 209. 211.
Joigny, 108
Joué, 172
Judas, 107
Julliénas, 120
Jurançon, 139

K.

Kaffa, 273
Kesroan, 282
Kesseling, 211
Kissanos, 264
Klebner, 170
Kœsterick, 208
Kokour, 6
Konigsbach, 210, 211

L.

Labarde, 149
Lacombe Clobal, 133
Lacryma Christi, 244
Lafitte, 64. 151
Lagrimas, 188
Lahore, 283
L'Ainé Mont Rachet, 101
Lamarque, 150
Lamego, 230
Lampsacus, 270
Langon, 155
Lapian, 150. 152
La Rose, 151
Latour, 151
Laubenheim, 208. 211
Landiras, 156
La Torre, 185
Laudun, 123
Layon, 168
Lasseraz, 251
Leattico, 264
Lejas, 133
Léognan, 146
Leoville, 151
Lesbos, 271

Lesparre, 152
Lestrac, 152
Leuvrigny, 79
Libos, 164
Lichenstein, 258
Liebfrauen-milch, 208
Liesten, 212
Limoux, 128
Lisbon, 230
Loché, 110
Lossery, 162
Louneuil, 161
Ludes, 77
Ludon, 149
Lunel, 2. 129
Luttenberg, 256
Lussac, 142
Luxuria, 271

M.

Macau, 146. 150
Macabeo, 134
Macedonia, 272
Macon, 64
Madiran, 140
Magdaleine, 127
Mada, 256
Madeira, 233. 236, 237
——— Malmsey, 233
——— Tinto, 236
Malaga, 52. 187, 188
Mailly, 76
Malgue, 131
Malijay, 177
Malmsey, 197. 262
Malvagia, 249
Mancy, 78. 80
Malvasia, 52. 134. 197. 262
Manzanares, 59. 183
Manzanilla, 187
Maranges, 111
Marcs d'Or, 98
Marcobrunner, 206. 211
Maraschina, 259
Margaux, 150
Mantes, 177
Marque, 213
Marsala, 252
Marsallet, 160
Mardeuil, 78
Marne, 75
Mareuil, 75
Marseilles, 62
Marsannay, 105
Martillac, 147
Mascoli, 252
Mas des Côtes Plaines, 120
—— de la Garigue, 133
Maslas, 256
Mataro, 185
Mazy, 98
Mazet, 359
Meal, 357
Medina del Campo, 186
Medoc, 54. 58. 147
Mees, 176
Meconi, 270
Meissen, 213
Ménetru, 173
Ménil, 79
Mercurol, 114
Merignac, 146
Mejannes, 124
Mezes-Malè, 256
Menes, 257
Méneser, 257
Minorca, 195
Meursalt, 100. 113
Migraine, 106
Milazzo, 392
Milo, 270
Mista, 270
Moguer, 194
Moirax, 164
Mozambol, 173
Molins, 79, 80
Molosme, 109
Molsheim, 170
Monaca, 251
Monçaon, 230
Mondferrand, 145
Monfaute, 108
Montferrat, 251
Montagne, 142
Montauban, 127
Montbartier, 127
Mont Basillac, 160
Montbazin, 130
Monte Fiascone, 240
Monthéchérin, 108
Montelcino, 249
Montigny, 174
Montmelien, 250
Monte Pulciano, 247
Monte Serrato, 251
Mont Rachet, 12. 101
Mont de Milieu, 107
Monthelon, 78. 80
Mont Saugeon, 92
Montilla, 194
Morea, 262
Morey, 113
Morgeot, 101. 104
Moscatello, 246
Moselle, 4. 206. 212
Moulin à Vent, 113
Moulins, 176
Moulis, 150. 152
Mountain, 187
Mount Ida, 260
Moussy, 79, 80
Moustille, 170
Muet, 42
Murviedro, 185
Muscatte, 246
Musigny, 98
Mussy, 93

N.

Napoli di Malvasia, 262
Narbonne, 128
Nasco, 251
Navarre, 186
Nauemberg, 213
Naxos, 270
Neac, 142
Nebiolo, 251
Neckar, 211, 212
Nerte, 122
Neufchâtel, 214
Neuville, 93
Neuvy, 109
Nicaria, 270
Nierstein, 208. 211
Novella, 244
Nues, 162
Nuits, 99. 104

O.

Œdenburg. 257
Œiras, 381
Œuilly, 79
Ofen, 254
Oger, 79
Ohio, 294
Olivotte, 109
Omados. 268
Oporto, 216

Oppenheim, 208
Orsan, 123
Oraison, 177
Orvieto, 246

P.

Palma, 197
Palotte, 107
Palunia, 257
Palus, 142
Pampeluna, 186
Panissac, 133
Pardigues, 127
Paron, 108
Particolore, 178
Paxarete, 194
Pedro Ximenes, 186, 187, 188
Peralta, 186
Perales, 186
Pericard, 164
Perrière, Clos de la, 98
Perrière Côte d'Or, 100
——— Nievre, 162
——— Tonnerre, 109
Pessac, 146
Pesth, 254
Petit Tokai, 259
Peyre-blanche, 122
Pezilla, 138
Pezo da Regoa, 229
Picardan, 129
Piccoli, 259
Pied de Rat, 107
Pierre Clos, 110
Pierry, 79
Piesport, 212
Piquette, 30. 49. 149
Pitois, 101
Pitcher, 202
Poches, 109
Poleschowitz, 258
Poligny, 173
Pollentia, 195
Pomard, 100
Pommerol, 142
Poncino, 249
Pontac, 156
Pouillac, 151
Pouilly, 110. 162
Poujols, 129
Portets, 147
Porte St. Marie, 164
Port Vendres, 134
Posega, 259
Potensac, 152. 156
Préaux, 109
Prée, 162
Premaux, 104
Prepatour, 176
Prignac, 152. 156
Puisseguin, 142
Pujols, 156
Pupillin, 174

Q.

Queryac, 152
Quéryes, 145
Quetard, 107
Quinsac, 145, 146
Quintigny, 172

R.

Rabadavia, 186
Rangen, 169. 355
Rasdorof, 274
Raulis, 160
Raussan, 150
Rech, 211
Rethymo, 264
Reventin, 121
Rheims, 73
Ricey, 93
Richebourg, 99
Riesling, 170
Riez, 177
Rilly, 77
Rimaneze, 249
Rinsport, 212
Rivesaltes, 2. 52. 131
Rioxa, 186
Rocal, 164
Roche, 162
Roche-rouge, 117
Rochgude Tinto, 118
Roffey, 109
Rogomés, 163
Romaneche, 109
Romanée St. Vivant, 99
——— Conti, 99
Rosolio, 271
Rosoir, 107
Roquemaure, 123
Rota, 187
Roth, 210
Roussillon, 58. 136. 138, 139
Rouvres, 108
Rozan, 159
Rüdesheimer, 209. 211
Rust, 257

S.

Sack, 197. 337
Saillant, 170
Salornay, 110
Salses, 138
Samos, 270
San Lucar, 194
Sance, 359
Sangeot, 111
Sansal, 259
Santorini, 270
Santo Stefano, 249
—— Domingo, 186
—— Antonio, 236
Sarepta, 274
Saumur, 167
Sauterne, 62. 142. 155, 156
Saverne, 170
Savigny, 104
Scharlachberg, 208
Schaffhausen, 213
Schamet, 202
Schelestadt, 170
Schierstein, 211
Scio, 271
Schloss-Johannesberger, 209
Scyssuel, 121
Segorbe, 185, 186
Sercial, 236
Serigny, 109
Serignan, 122
Serra, 178
Serres, 129
Setuval, 230
Sexard, 257
Sherry, 190
Shiraz, 278
Sillery, 73
Sitges, 184
Solomè, 161
Solutre, 110

Sorgues, 121
Soussan, 150
Saulayes, 162
St. Agnan, 145
St. Albero, 250
St. Ambroix, 124
St. Amour, 110
St. Andre de Cubsac, 144
——— de Bois, 144
St. Avertin, 172
St. Basle, 92
St. Brice, 156
St. Christoly, 152
St. Colombe, 164
St. Croix du Mont, 156
St. Cyprien, 133
St. Cyr sur Loire, 172
St. Denis, 142
St. Emilion, 143
St. Estephe, 142
St. Etienne, 120
St. Foi, 142
St. Foy, 120
St. Genies, 123
St. George's, 99. 146. 161
——— d'Orgues, 129
St. Gervais, 144. 146
St. Germain, 145. 152
St. Gilles, 122
St. Gyorgy, 257
St. Hippolite, 124
St. Jaques, 98. 214
St. Jean du Musois, 125
St. Joseph, 125
St. Julien, 120, 150, 151
St. Lambert, 151
St. Laurent, 123. 152
——— du Var, 139
St. Leger, 120
St. Loubés, 146
St. Lucia, 178
St. Martin d'Ablois, 79
St. Martin, 109
St. Menehould, 73
St. Mexant, 144
St. Michael, 176
St. Pardon, 155
St. Patronio, 259
St. Pérai, 121. 125
St. Romain, 144. 146. 161
St. Sauveur, 152
St. Selve, 147
St. Seurin de Cadourne, 151
St. Trelody, 152
St. Thierry, 77. 92
St. Victor de la Côte, 123
St. Vivien, 152
Stein, 211, 212
Steinberger, 209
Suabia, 2
Suma, 160
Syracuse, 52. 252
Syrmia, 254
Szeghi, 256

T.

Tâche, 99
Taillan, 150. 152
Talence, 146
Tangarog, 274
Tallya, 256
Taormina, 252
Tarbes, 140
Tarczal, 358
Tarento, 244
Tarragona, 185
Tavel, 123
Tcoulet, 160
Teheran, 279
Tenedos, 270
Teneriffe, 196
Terrasse, 160
Terrats and Torémila, 138
Thassis, 117
Thesac, 164
Thiegartner, 202
Thurot, 108
Tintilla, 194
Tinto di Rota, 194
Tisanne, 377
Tissey, 109
Tokay, 254
Tolesva, 256
Tonnerre, 109. 113
Torins, 113
Torre, 185
Torren-Milar, 138
Toscolano, 247
Toul, 166
Toulenee, 155
Tournon, 125
Trebio, 249
Tresne, 145
Trois Puits, 77
Tronchoy, 109
Tropfwermuth, 257
Tsadany, 256
Tyrol, 258

V.

Vadans, 173
Val di Mazzara, 252
—- di Marina, 249
—- Mur, 107
—- de Peñas, 59. 183
Valdrach, 212
Valensole, 177
Valentons, 146
Valeyrac, 152
Valloux, 108
Valteline, 214
Varez, 171
Vauciennes, 79
Vaucluse, 121
Vault, 108
Vaumorillon, 109
Vaux, 161
——- Desir, 107
Vauzelles, 162
Velez Malaga, 190
Venteuil, 79
Verdelais, 144
Verdese, 178
Verdea, 249
Verdona, 197
Vergisson, 110
Vernaccia, 246
Verneuil, 79
Véroilles, 98
Vertus, 76. 94
Verzy, 78. 92
Verzenay, 73. 76. 92
Vézeley, Clos de, 108
Vezannes, 109
Viarosé, 127
Vicenza, 247
Vidonia, 197
Vignettes, 127
Villarinho des Frieres, 230
Villedieu, 127
Ville Dommange, 77. 94
Villenave d'Ornon, 146
Villena, 186
Villeneuve, 164
Villers Allerand, 75
——— Marmery, 73

Vinades, 126
Vinaroz, 186
Vinay, 79
Vin de la Maréchale, 77
Vin de Cances, 127
—— de Cargaison, 129. 146
—— caussés, 164
—— de Chypre, 269
—— des Côtes, 144
—— de Cotillon, 117
—— cuit, 196
—— fou, 176
—— de Garde, 172
—— blancs de Garde, 53
—— petit, de Greves, 147
—— de Grenier, 53
—— de Grenache, 121. 133, 134
—— gris, 177
—— de Henry IV. 176
—— jaune, 53. 175
—— de Paille, 52, 53. 171. 173
—— demi Paille, 52
—— de Paysans, 153
—— de Primeur, 139
Vin râpes, 317
—— de Reméde, 122
—— de Tocanne, 91
—— de Taille, 53
—— de Cosperon, 137
Vinzelles, 110
Vino Brozno, 186
—— Cotto, 246
—— Crudo, 246
—— Græco, 244. 249
—— Morto, 247
—— de Oro, 282
—— Passado, 238
Vino de Racion, 185
—— Rancio, 186
—— Seco, 238
—— Santo, 247
—— Tinto, 185, 186
Violettes, 63
Virac, 129
Virelade, 156
Vittoria, 392
Viviers, 93. 109
Volnay, 100
Vosnes, 99
Vougeot, 98

W.

Wangen, 212
Warwitz, 254. 257
Wehlen, 212
Wermuth, 257
Wiessel, 259
Wissemberg, 170
Wolxheim, 170

X.

Xeres, 191

Y.

Yezd, 280

Z.

Zambor, 256
Zante, 271
Zeltingen, 212
Zymlensk, 274



LONDON:
GILBERT & RIVINGTON, PRINTERS,
ST. JOHN'S SQUARE.

Shortly will be published,

In 12mo., by the Author of the "HISTORY OF MODERN WINES,"

EVERY MAN HIS OWN BUTLER;

OR,

A FRIENDLY COMPANION TO THE WINE CELLAR.

FROM THE LIBRARY OF
WINE INSTITUTE
85 SECOND STREET
SAN FRANCISCO



